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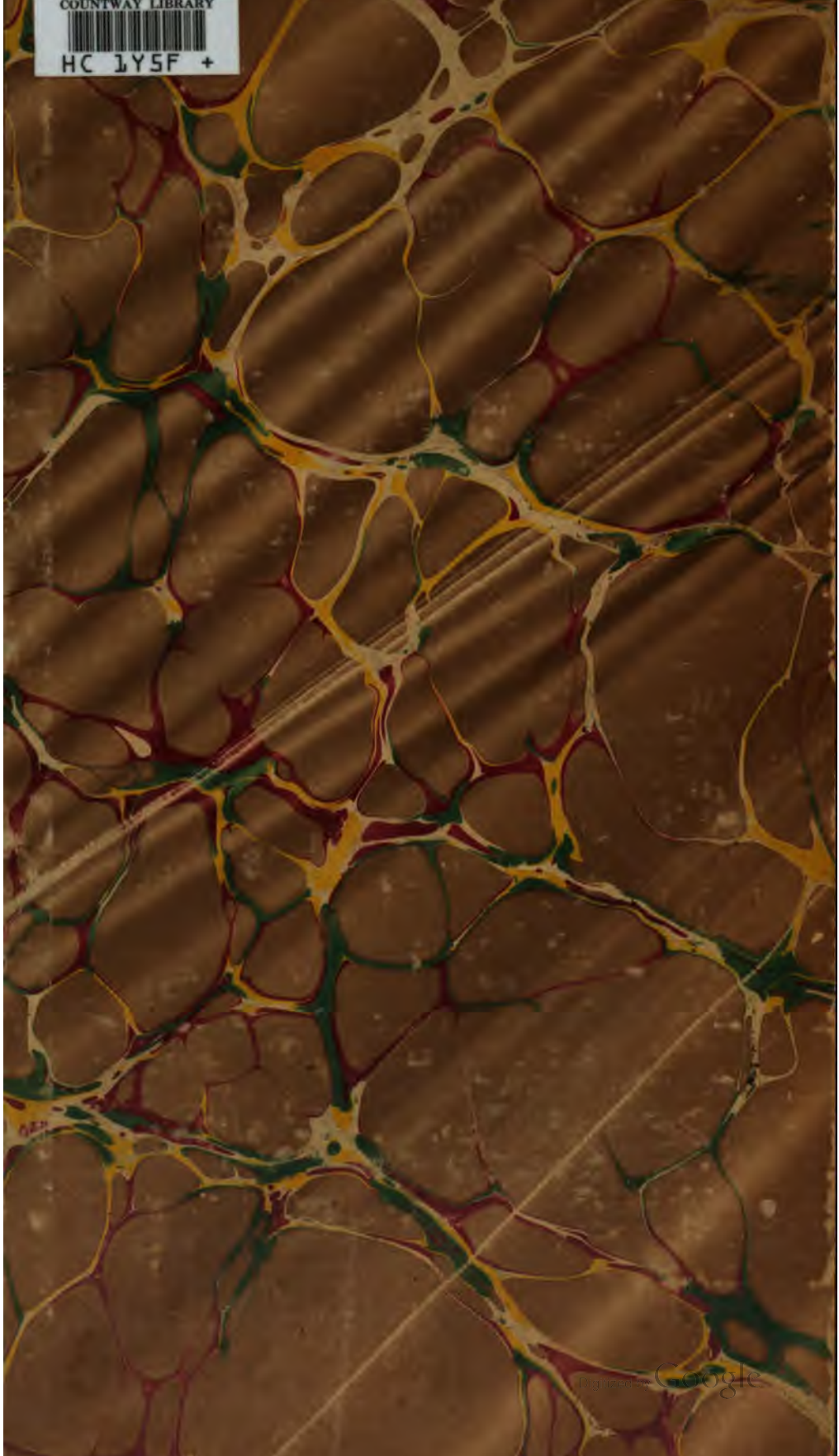
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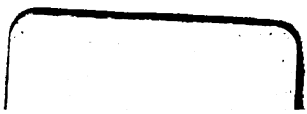
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PRACTICAL OBSERVATIONS

ON

THE VENEREAL DISEASE,

AND ON THE

USE OF MERCURY.

BY ABRAHAM COLLES, M. D.

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83°

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Two motives influence me in placing your distinguished name in the front of the book which I now publish. I have the vanity to wish it to be known that I am honoured with your friendship; and I cannot neglect the only opportunity that may ever present itself of paying such tribute as I have to offer—not merely to the highest professional station and celebrity, but to a juster object of admiration: that zeal in the cultivation of science which has outlived, in you, all the ordinary incentives to human industry. Enjoying a splendid fortune, and an undisputed precedence, you have nothing further in wealth or eminence to desire. In such circumstances, the world can ascribe your unabated ardour and energy in those fields of enquiry, where you have already had such brilliant success, to nothing but the purest love of truth, and the virtuous ambition of promoting the interests of humanity. An example such as you set will always have more admirers than imitators: amongst the former permit me to claim a high place; and believe me,

My dear Sir Astley,

With these and every other sentiment
of regard and respect,

Your devoted friend and servant,

ABRAHAM COLLES.

Stephen's Green, Dublin, 20th Jan. 1837.

PREFACE.

I have long been of opinion, that, in the whole range of surgical diseases, there is not one which may with more justness be styled the opprobrium of surgery, than the Venereal Disease.

When we recollect that, for three centuries and upwards, medical men throughout all Europe have been employed most extensively and uninterruptedly in the treatment of this disease; that, during almost the entire of that period, a remedy has been known which possessed the power of curing this disease; that this remedy, since its first discovery, has undergone a variety of modifications and combinations, supposed to render it more suited to particular states or forms of the disease; that, in addition to this, some other remedies, and other plans of treatment, have been found to effect its cure;—when, I say, we take all these facts into account, surely it might be reasonably expected that, with all these advantages, we should by this time have arrived at a knowledge of fixed rules for its treatment, and have acquired such a command over it, as to be able to say that we can control its course and check its ravages.

Yet I think it is not an exaggeration to assert, that at no period, since the disease was first subdued by mercury, has the opinion of practitioners been more divided and unsettled, or their treatment more wavering and unsuccessful.

Anxious to have this reproach wiped away—not merely because it involved the character of the profession, but rather because it too clearly showed that the human race was suffering severely from our imperfect knowledge of the treatment of this disease—I sought to discover the causes of our backwardness. After mature consideration, I was led to attribute it principally to two causes:—

First. The imperfect knowledge we possess of the natural course or natural history of the Venereal Disease.

Second. The very imperfect knowledge we possess of the means of directing the operation of mercury, so as to make it act in a salutary manner; and the equally imperfect knowledge we have of the earliest phenomena which would indicate that it is beginning to act as a poison rather than as a remedy.

If this opinion as to the causes which have so long prevented us from acquiring the command over this disease be well founded, it will then be seen how vain must be the attempt of any single individual, however extensive his opportunities, to supply all these material defects; this only can be hoped for from the co-operation of very many.

In conformity with these sentiments, I have stated in detail such observations as I have made as to the progress or natural history of the Venereal Disease; and I have offered some remarks on the mode of

administering mercury, so as to induce the salutary action of this medicine. I have, also, attempted to point out a few early indications which denote that its action will become poisonous if its use be persevered in; and I have detailed many of the symptoms of Syphilis, and stated my opinion as to their appropriate treatment.

Although I fear it will be found that I have not shed much light on this obscurity, yet I trust that the attempt will be favourably received by the profession, and that it will have the effect of stimulating others more capable to pursue the same line of investigation. It is only from the contribution of many enquirers, that a complete development of a subject of such a nature is to be looked for; and I trust that no one will withhold the result of his observation, merely because he has but little to offer; for the delineation of one new feature in the character of the disease, and even a single additional rule to guide us in the management of mercury, must prove a valuable acquisition to our present stock of knowledge.

From this statement, then, the reader will not expect to find in the following pages a systematic treatise on the Venereal Disease; on the contrary, some symptoms have not even been mentioned, and others have been noticed only in a cursory manner. The remarks which I have offered are merely the result of my own observations and reflections. Of what value these may prove, I leave to my professional brethren to decide—only assuring them that the facts are stated with the most scrupulous fidelity.

To the observations on the use of mercury in Syphilis, I have added some observations on the use of this medicine in the treatment of diseases not venereal. In this second part of the work I have studiously avoided any mention of its use in the diseases in which its efficacy is generally known and long established; and I have designedly and strictly confined myself to those in which it has been only very rarely employed, but in which I have had the good fortune to have found it a most active medicine, and a most speedy and invaluable remedy.

In conclusion I beg to remark, that I feel fully sensible of the many inaccuracies, both in style and composition, which occur in the following pages. My great object has been to convey my own meaning in a clear and perspicuous manner; if I have frequently expressed myself in commonplace and too familiar language, it must be attributed to my being but little accustomed to literary composition, and long in the habit of delivering lectures extemporaneously. I trust, however, that these deficiencies will be excused, or, at least, not regarded as of any material consequence in a work, the sole object of which is practical utility.

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PART II.

ON THE USE OF MERCURY IN AFFECTIONS OF THE NERVOUS SYSTEM.

PRACTICAL OBSERVATIONS.

PART I.

ON THE USE OF MERCURY IN VENEREAL COMPLAINTS.

CHAPTER I.

ON THE NATURAL HISTORY OF THE VENEREAL DISEASE.

Value of a knowledge of the natural history of this disease—Obstacles to our acquiring this knowledge—Order of symptoms—Mode in which this disease ultimately proves fatal—Secondary symptoms are capable of communicating this disease.

That morbid like healthy action has its laws, and that disease in many of its apparently fickle changes and Protean forms is but proceeding in obedience to certain rules, are positions established by innumerable examples, and by convincing proofs; witness the progress of many fevers; the whole history of small-pox; most of the eruptive or exanthematous diseases; the influence of vaccination, &c. &c.

These, and many other similar facts, have taught us that certain diseases appear to be under a certain influence as to the course they take, or as to the order in which their several symptoms appear, and that morbid poisons, in particular, excite a peculiar train of action, each producing one particular set of symptoms, and none other, and that these occur at regular periods, and proceed in a certain regular order, in a sort of fixed succession; and that in the constitution they infect, as well as in the part to which they are applied, they never fail to give rise to certain morbid processes, and to effect certain changes, which finally either lead to their own extinction, or to the destruction of the system, or of the part in which they have resided. When we reflect on these facts, and on the almost unerring certainty and undeviating regularity with which these occurrences take place, we must at once come to the conclusion, that to trace these laws, that is to expose the course and progress of disease, so as to be enabled, even beforehand, to predict the next symptom it will produce, must be a task not only truly interesting, but one of essential service in a practical

point of view, for without this knowledge, at least to some extent, the practitioner must be in frequent uncertainty and doubt, and consequently liable to commit many errors and to meet many disappointments in his practice.

Accordingly, in those diseases in which the attention of the medical profession has been most successfully exerted in developing the particular course they are to run, and in tracing the order in which their several phenomena are to occur, we find that the plan of treatment, to be adopted for their cure, has been proportionally well established on principles simple and intelligible: let us hope that, in the treatment of that disease to which these pages more particularly apply, similar exertions may produce similar effects, for I cannot refrain from expressing my strong conviction, that one very principal cause of those unsteady rules of practice, which exist even in the present day in respect to the treatment of syphilis, is to be found in the want of a real knowledge of the natural progress of this disease; and that it is to an ignorance of the laws under which it proceeds, or to a want of knowledge of its natural history, that we must attribute the vacillation of some, and the contradictory assertions of others, who have expressly treated of this affection, its consequences, and cure.

We meet with nothing like a scientific description of the venereal disease in any of the earlier authors; in their writings we find only a mere enumeration of various local symptoms, without any arrangement or reference to their order of succession, and without any account of the course which any one symptom pursues through its different stages. Strange as it must appear, yet it is most true, and has proved most unfortunate for our science, that prior to Mr. Hunter's treatise on the venereal disease the profession possessed no systematic account, no accurate description either of its primary symptoms, or of the period or the order in which its secondary effects usually occur. This invaluable treatise poured a flood of light, not only on the natural history of this disease, but also on its pathology and treatment. It was Hunter who first demonstrated with clearness and precision that secondary symptoms succeed the primary at an interval of six or seven weeks, and that they are generally preceded by an eruptive fever, which is ordinarily of an inflammatory type: he also described the third order of symptoms; and all this he has done with an accuracy and fidelity which the subsequent experience of the profession has amply confirmed.

It is much to be lamented that Mr. Hunter did not prosecute his enquiries still further, that he did not, for example, trace the full progress of secondary symptoms, or mark their natural tendency to amend, and then again to relapse, each unfavourable change being preceded by constitutional disturbance, and that he has omitted to notice the probable period of time which these symptoms occupy from their origin to their acmé, and thence to their decline. Whether these omissions proceeded from want of time, or from his having adopted the opinion that the venereal disease "had no tendency to cure itself, or that the constitution was unequal to the cure of this dis-

ease," is now of little moment. But does it not appear strange, that subsequent writers have not made some effort to supply these deficiencies? Every person, even of those superficially acquainted with the medical literature of this disease, who has perused the brief history and the clear classification of its symptoms which this distinguished surgeon has given, must have observed with satisfaction the great improvements which have been effected thereby in its pathology and treatment; and it was reasonable to expect that a sense of those benefits would have impelled some later writer to investigate with zeal the most minute particulars in the progress of its symptoms. No doubt, the opportunities for prosecuting these enquiries must have been but rare, as a little reflection will show; for, after the first series of secondary symptoms have appeared, it must be extremely difficult to trace the further steps of the disease, because every practitioner is so impressed with the sense of duty to do all in his power for the relief of his patient, that he cannot, consistently with that feeling, withhold such medicine, or refrain from such means as may be best adapted to the case: hence the further course of the present, as well as of any future symptoms, must be more or less altered from that which they would have pursued, if totally uninterfered with.

Another obstacle which, till within these few years, obstructed all attempts to trace the natural progress of the venereal disease, was the uniform employment of mercury in every form and symptom of syphilis. If that medicine had been administered in such a manner as to have had merely that effect upon the symptoms which it had in Mr. Hunter's experiments, namely, removing one set of symptoms without curing the disease, and allowing the next series to appear in their natural time and order, we could then with ease and certainty trace the progress of the disease through all its stages; but this is by no means the case, for we find in the majority of instances, where secondary symptoms have occurred after the use of mercury, that this medicine has been administered very freely, and that, therefore, their occurrence is not to be attributed to the too sparing use of mercury; on the contrary, in the majority of patients who have been thus unsuccessfully treated, mercury has been carelessly or injudiciously employed, and has been pushed so far as to injure the general health materially, while at the same time it has so changed the local symptoms that we cannot, without great difficulty, recognise their true pathognomonic characters; for example, a venereal ulcer in the throat will no longer present the true specific appearance, if the patient has been overdosed with mercury, but will rather exhibit the features of a scrofulous ulceration, and will ultimately heal with that silvery cicatrix which is the natural termination of scrofulous ulceration in the throat; here, then, the treatment has caused such a change in the local character that we have been unable to recognise its true syphilitic nature. Another very important change which is sometimes effected in this disease by this injudicious or overpowering use of mercury, is that the order of succession of the symptoms is completely altered;

thus, for example, if it have been administered in this way for venereal sore throat, we shall probably find that the patient will be attacked, even during its exhibition, with nodes, or venereal swelled testicle; and that, after this third order of parts has been thus affected, a venereal eruption (a symptom of the second series) will make its appearance; hence any history of the course of the venereal disease drawn from the description of its symptoms, during its advanced stages, in cases where mercury has been administered freely and injudiciously, cannot be relied on; for in such, a new set of symptoms will often appear in a quick and in an irregular succession, even while the system is under the operation of the mercury; one order will be, as it were, anticipated, while another, such as the eruption, will be postponed (contrary to the usual course) until after the third order of symptoms shall have appeared.

Too frequently are the powers of the constitution so lowered by this indiscriminate use of mercury, that it is no longer able, as it were, to exhibit the eruptive fever, but it seems to be prematurely sunk into that weakened state which attends the latest stages of syphilis. We can only hope to arrive at an approximation to the true history of the course of the venereal disease, by paying close attention to those cases which have been treated on the non-mercurial plan; in such, although the natural duration of each symptom may be disturbed by whatever treatment is pursued, (as the eruption, for instance, may be made to disappear even quickly by the use of tartar emetic,) yet the order in which the subsequent symptoms will occur, and the individual features of each, will be preserved as faithfully as if no medicine whatever had been prescribed. I make no doubt but that many surgeons who have adopted the non-mercurial plan of treatment, will be ready to favour the profession with most valuable information on this all-important point; for, by referring to their daily notes of venereal cases, and collating a number of these, they can trace with unerring accuracy the march of symptoms, their order, their periods of appearing; and with equal certainty can describe the states of the system which preceded and accompanied the various changes in the local symptoms.

Another obstacle to our arriving at a correct and full knowledge of all the phenomena of the venereal disease, is the lengthened duration of it, when it is not controlled or cured by medical treatment; for we meet with various instances in which we can distinctly trace back the history of this disease to a period of five or six years. The unfortunate sufferer cannot be supposed to have remained during all this time under the care of the same surgeon, however strongly he may at its commencement have been impressed with a high opinion of his talents and skill; still the melancholy experience that he has not been cured by him, in a period of twelve or eighteen months, must shake his confidence, and create a desire for change, in the hope that another practitioner may prove either more skilful or more fortunate in the management of his case. The friends of this unhappy patient will, at all events, insist upon

his applying to some other surgeon, in whom they have more confidence: nor is it to be wondered at, that these changes should take place three or four times during the continuance of such a protracted state of suffering. If we wish to watch the course of this disease in an hospital patient, we are prevented not only by the fact, that he also loses confidence in the skill of his surgeon, and becomes anxious to put himself under the care of some other, but also frequently by the rules of the institution, which will not admit of a patient being retained beyond a limited period, when his case is not in a certain train to be cured. During the long period in which I have been engaged in practice I cannot recollect to have retained, during its entire course, the confidence and treatment of a protracted venereal case except one, and that I was fortunate enough to cure after a period of six years!

These obstacles, however formidable they appear, should not prevent us from attempting to gain a perfect knowledge of the course of this disease; it cannot be expected to be obtained by individual observation, it will require the labour and attention of very many, each of whom, however, by contributing some new fact, or confirming one already known, may furnish the materials to supply this desideratum, and so complete the natural history of this disease. Should medical men generally look on this matter in the light that I do, I am confident that in a very few years we shall see this very desirable object accomplished, especially as so much valuable information must have been collected by those practitioners who have of late years devoted themselves to the non-mercurial treatment.

Notwithstanding all these very serious obstacles, still we occasionally enjoy an opportunity of tracing some parts of the progress of this disease; thus we sometimes meet with an individual who, either from absolute ignorance of the nature of the disease with which he is troubled, or from an indifference and recklessness of consequences, has totally neglected his disease from its very commencement, and only seeks for medical assistance after the secondary symptoms have been established. If such a person be, from his situation in life, unable for a time to submit to active treatment, or if the state of his health render him unfit for it, we are afforded an opportunity of studying in part the uninterrupted progress of the disease. Under such circumstances I have observed, that when the local symptoms have become fully established, which is probably in two or three weeks after they make their appearance, they then become stationary, and the constitution is relieved from the febrile disturbance. In this quiescent state the symptoms may remain for about three weeks; they will then show a strong disposition to amend, and sometimes they will proceed so far as to impress the surgeon with a hope, and the patient with a firm conviction, that he is about to get perfectly well. But this illusion, having lasted for two or three weeks, is dispelled in general by a fresh attack of eruptive fever, and by an eruption or sore throat, although sometimes other symptoms (iritis for example) be added

to those under which the patient had been previously suffering. How long the disease might continue in this condition of alternate improvement and deterioration, I cannot pretend to say, as I have not had an opportunity of witnessing in the same individual more than two, or at the utmost three, of these revolutions: from what I have seen of such cases I am led to say we may calculate upon each relapse as likely to recur every third month. These remarks apply to the secondary symptoms as observed for two, three, or four of the first revolutions.

At a later, and sometimes, though rarely, in an early stage of the disease, we find a somewhat different process ushering in a new attack; thus we sometimes observe that the patient who during the four or five preceding weeks had been improving in flesh, colour, appetite and strength, now begins to exhibit a different aspect; his countenance alters considerably, it becomes sickly, his complexion assumes a waxen hue, and he evidently loses flesh from day to day, and all this takes place while the patient himself is not at all aware of the change, and is still less suspicious as to its cause. In some time, however, the patient complains of night sweats, want of sleep, loss of strength, and declining appetite, so that in the course of two or three weeks he is reduced to a state of great weakness and emaciation: this downward course proceeds steadily until a fresh order of symptoms appears and becomes established.

I must here remark that I have repeatedly observed these newly appearing symptoms to be, as it were, a repetition of those that preceded them: thus, for example, a patient may have had a papular eruption which remained stationary for two or three weeks, then began gradually to decline, so as to lead him to hope he was about to become totally free from it; but this eruption having faded to a certain extent, has then become stationary for two or three weeks, and the general health has improved; at the end of this time, however, the health again begins to suffer in the manner above described, nor does it cease to decline until this new train of symptoms has become for some time established. More commonly, however, this long-continued wasting is followed by some new symptoms, often by those of the third order, succeeding the repeated renewals of secondary symptoms. After an attack of this lengthened nature we seldom if ever observe a distinct eruptive or premonitory fever appear in this patient; and I may also add, that the local syphilitic symptoms cease to present their characteristic signs as strongly marked as heretofore. Thus it would seem as if each eruptive fever, or rather each succeeding attack, brings the constitution into a weaker and weaker state. In the very advanced stages of the venereal disease we do not see those periodical changes; the constitution then appears unequal to any struggle, so that one continued and increasing state of debility, with slow fever and great emaciation, are conjoined to the local symptoms, while the latter also are but little disposed to undergo any change, except a slow and gradual deterioration: thus I have sometimes, though

rarely, seen a tubercular eruption, combined with pains of bones and joints, continuing during four or five years, and undergoing no material change, being at one time a little better, and at another a little worse.

It must be obvious that without a knowledge of the various changes above alluded to, the practitioner will be very liable to err in forming a judgment of the different plans of treatment which have been pursued; for were he to administer mercury, sarsaparilla, acids, or any medicine, at the particular time when the symptoms were spontaneously declining, he would be disposed to attribute the improvement to his prescriptions; and, on the other hand, if he had commenced the treatment, when the health was about to decline, (as it always does previous to the appearance of a new set of symptoms,) he would be equally disposed to condemn whatever he had prescribed as worse than useless: I consider, therefore, that inattention to these circumstances has been one (and the great) source of those various contradictory statements which have been made even by men of sound judgment and strict veracity, as to the value of the different modes of treatment, and of the different remedies which have been recommended at various periods for the cure of the venereal disease.

When the disease has arrived at that advanced stage in which the general health has been broken down, and the local symptoms are so much changed as scarcely to be recognised as venereal, it is still a matter of uncertainty how long the patient (if not relieved by art) is to drag on a miserable existence, or in what manner a termination is to be put to all his sufferings. Many of its unfortunate victims are destroyed by what may be considered a continuation of the disease; but by far the greater number appear to be carried off by other complaints to which we may presume they were naturally disposed, or to which they were rendered liable by the very weakened and reduced state of their general health.

Among the former we may mention an ulceration of the throat, which, creeping downwards, at length seizes upon the larynx, and causes a destruction of a greater or lesser portion of this organ. The lungs quickly suffer from this affection of the larynx, and the patient dies, seemingly worn out by difficult respiration, and by severe cough, with profuse expectoration and hectic fever.

Others again are destroyed by the repeated exfoliation of the bones, frequently of those of the cranium, and sometimes of the long bones. Moreover, there are others who, having been forced by severe nocturnal pains to have recourse to opium, cannot afterwards be prevailed on to relinquish this medicine, but are rather disposed to increase the quantity of each dose. Although now almost free from the pains which had driven them to adopt this medicine in the first instance, such persons, we remark, cannot be induced to rise until late in the day, they have no appetite for breakfast, but will probably take some highly seasoned food for dinner; in the early part of the day they are quite torpid, averse to every kind of exercise; in the afternoon they seem to revive,

become more animated in the early part of the evening, and are unwilling to retire to rest until a very late hour. One or two years may pass on in this manner with little apparent change; at length they sensibly decline in flesh, a diarrhoea supervenes, which is sometimes attended with sickness of stomach and vomiting, and by this they are ultimately carried off. It is remarkable that from the time these patients give themselves up to the inordinate use of opium their symptoms exhibit but slight traces of a venereal character.

Many others are carried off by diseases which have no other connection with the original venereal affection except that by it, or rather by the treatment adopted for its cure, their system has been rendered more susceptible to the attacks of disease in general. Perhaps the greater number of such sink under attacks on the chest, such as pleuritis or pneumonia, terminating in serous effusion. Many of those who are strongly predisposed to phthisis fall victims to that disease; not a few are found to have the liver enormously enlarged, extending across the abdomen, and even below the umbilicus: this is followed by slow emaciation, and after some months by ascites and anasarca. Dysentery also at times seems to destroy some of those who have very long suffered under syphilis, and, as might be expected, ulceration of the intestines is discovered after death.

From this account, then, it is very evident that there is no certain period after the appearance of the primary disease at which death terminates such protracted cases of syphilis. We may say that in general this event takes place between the second and fifth or sixth year.¹

A most important point for our consideration in the history of the venereal disease is the question, whether secondary symptoms are capable of infecting and of communicating this disease. Contrary to the opinion of Mr. Hunter, and perhaps of most surgeons of the present day, I am convinced that they do propagate this disease, and this opinion I shall endeavour to support by adducing the following facts and arguments.

Many years ago a young surgeon of my acquaintance, paying his addresses to a young lady, had unfortunately at the time a secondary venereal ulcer on the lower lip. The lady contracted an ulcer on her lip, which was soon followed by an enlarged lymphatic gland under the lower jaw; the ulcer had the character of venereal so strongly marked, that the case was pronounced to be syphilitic, and she was directed to use mercury; unfortunately

¹ This account of venereal patients who, after long suffering have been carried off by diseases not at all akin to, or naturally attendant on syphilis, is partly derived from, and is materially confirmed by, the concurrent testimony of Dr. Thomas Farrar, now Professor of Surgery in the Belfast institution, whose zeal led him, during four years, while a pupil at Stevens's hospital, to follow many of these unhappy sufferers through the various stages of their misery, to watch over them in their own wretched private abodes, and to trace them through the different hospitals of this city.

this medicine was employed in doses too powerful for her delicate constitution to bear with impunity, and this, joined to deep mental distress, seemed to induce phthisis, to which her system was strongly predisposed, and she shortly died of what is vulgarly termed a galloping consumption. This case, which came under my observation when I was but a very young practitioner, made a deep impression on my mind.

The next fact which I shall adduce is one that occurred in this city twenty-five years ago; and as the circumstances have been recorded by my friend, Dr. Healy, in *Tilloch's Philosophical Magazine*, vol. xxxix. page 90, I shall extract his account, and annex to it a few further particulars which came within my own observation.

"On the 23d of July, 1810, I was requested by a respectable friend to see his wife, who complained of great and general debility, loss of appetite, with violent pain of the head. She was nursing, and the child seemed very healthy. She said she had been attacked with hemorrhoids about three weeks after her lying-in, which was on the 11th May, 1810. She had had small glandular swellings in her groin, which had subsided; had taken no medicine. About the 28th, reddish spots appeared on her arms, and small tumours scattered over her thighs, which disabled her from walking. She complained of profuse perspiration on her breasts, particularly at night. I directed the warm bath with alteratives.

"August 7th. Notwithstanding the treatment, the symptoms became much aggravated, and the reddish spots had spread upon her face. I requested my friend to confess whether he had not contracted the venereal disease; to which he answered in the most solemn manner in the negative.

"On August 14th, I required a consultation, and met one of the most eminent physicians in Dublin. After examining the patient, he mentioned our suspicion to the mother of the lady, that the disease was venereal. It was deemed advisable to have a surgeon in consultation, and that we should meet the following day.

"On the 15th we met, and that consultation removed every doubt of the nature of the disease; and as she did not receive it from her husband, I suggested to the medical gentlemen that the accoucheur might have conveyed the infection by his hand. That mode was deemed possible, though not very probable; and our opinion to that effect was communicated to the accoucheur.

"All that train of misery incident to supposed connubial infidelity, aggravated by the sufferings of a loathsome disease must have been the fate of my patient, if she and her husband had not proper mutual confidence, and a friendly reliance on my further investigation.

"On the evening of the 14th August, I visited a patient convalescent from fever, from whom I heard that a Mrs. M. was dangerously ill, not only from a disease which she had contracted at the time of her lying-in, but also from a very sore mouth. On enquiry,

it appeared that she was attended in her accouchement by the same gentleman who attended my patient.

“August 18th. I met Mrs. M—’s brother, with whom I was acquainted; and anxious to vindicate the character of my patient, I told him my suspicions of his sister’s disease; and asked him whether I could with propriety mention my suspicion of the disease to Mr. M. He answered in the affirmative, and introduced me to Mr. M. I related to that gentleman the situation of my patient, and requested to know the name of the disease his wife was labouring under, and the time of her delivery. He said she lay in on 22d May, 1810, that the accoucheur was treating her at present for cancer in the womb, or for a liver complaint. I submitted my opinion that it was the venereal disease, and also that she might have been infected at the time of her delivery, the accoucheur conveying the infection by his hand. He added, he suspected her disease to be venereal, and had mentioned that suspicion to his wife frequently. I was introduced to the lady, and after examining her, I became more confident in my opinion (as there were buboes in her groins). I advised Mr. M. to have a conversation with the accoucheur, as to the nature of the disease. In consequence of this, Mr. M. called a consultation of the same medical gentlemen with the accoucheur, who met on the 19th.

“The surgeon, before the consultation, called me out of the room, and communicated what the accoucheur had informed him of that morning; namely, that he had contracted the venereal disease in his finger, in the course of his practice, and had conveyed this disease in that manner. It was deemed advisable, and even indispensable, for the accoucheur to confess that he was the cause of this severe ailment to these ladies; which he complied with by letter, not only to these ladies, but to others who had been diseased in like manner. Meaning to view the subject merely as an instructive medical report, suffice it to say, that upon a full and legal investigation, it was deposed on oath by a medical gentleman on behalf of the accoucheur, that he had contracted the disease in the course of his practice, about two years previous to the preceding unfortunate event; that he had undergone a complete course of mercury, and used even a larger quantity than is usual, and that he conceived himself incapable of communicating the disease; that previous to that gentleman’s attending my patient, a window-sash had fallen on his finger, which produced a sore; that this sore became a venereal one, and infected the ladies before he was aware of its real nature. The child of the first lady was weaned on the 15th, afterwards spoon-fed, and continued healthy. The other child was transferred about the 19th to a sound healthy nurse. In a month, a rash appeared on the head of the child, which in a little time spread over the body, and remained anomalous for a month, but afterwards became distinctly syphilitic, and yielded to the influence of mercury.” Such are the facts stated by Dr. Healey; and if credit be attached to them we must conclude that a secondary venereal sore can produce primary ulcers.

I am happy to have it in my power, from personal knowledge and observation, to corroborate Dr. Healy's statement, and thus to remove the doubts of any who might incline to be skeptical respecting it. I was not myself called upon to visit any of the sufferers on this melancholy occasion, nor was I consulted by the accoucheur himself, who was the undesigning author of their sufferings. My knowledge of the circumstances occurred accidentally in the following way :

Walking at a very early hour one morning in the month of March to my hospital, I met this gentleman in a retired street. He told me that he had been up all night, attending the wife of a friend of mine in that neighbourhood—that he had left her quite safe. He next stated, that he had not been in good health for some time past—that he had been afflicted with severe rheumatism, for which his friend, Mr. R., had made him take a great deal of James's powder, and other diaphoretics; and that, by his advice, he had also used several tepid baths, but all with very little benefit; however, that within the last few days he had got rid, in a great measure, of the rheumatic pains, by the coming out of a general rash; at the same time he drew off his glove, and showed me the palm of his right hand. My surprise was very great on beholding a most unequivocally syphilitic eruption. I also noticed an ulcer on each side of the nail of the index finger; these bore the strongest marks of secondary venereal sores.

I did not at the time express to him my opinion of the nature of his disease; but told him, in a most impressive manner, that I thought he should not lose any time in showing it to his friend, Mr. R., under whose advice he was acting. When we parted, I could not help wondering at the readiness and unconcern with which this gentleman exposed the symptoms of his disease; and I at once concluded that he was totally ignorant of the common appearance of the venereal disease. At the period of this rencontre, and even for two months afterwards, no alarm, no notice of any mischief done by this practitioner in midwifery, had occurred among his patients; and, therefore, it is plain that all those ladies who were contaminated by him received the infection from the secondary venereal ulcer on his finger.

In a short time after the nature of this gentleman's disease became publicly known, I saw him in consultation with his attending surgeon, and had then an opportunity of examining his symptoms at my leisure; and I became perfectly satisfied that his finger had been affected with secondary venereal ulcers.

Let us for a moment reflect upon the nature and value of this testimony. A surgeon, deservedly of the highest character in Dublin, deposes on oath, before a commission of legally appointed arbitrators, that this accoucheur had two years previously been afflicted with primary ulcer on the finger, contracted in the practice of his profession; that he had undergone a complete course of mercury, and used even a larger quantity than usual; and that a window-sash having fallen on his finger, it produced a sore, which

proved also to be venereal, as it infected several females before he was aware of its real nature. I can feel no hesitation in saying that the ulcer on each side of the finger nail was most decidedly a secondary venereal ulcer, and that the eruption was as strongly marked a syphilitic eruption as any I had ever seen. The readiness with which this gentleman unnecessarily exposed the symptoms of his disease to me, tends very much to prove that he himself was not at all aware of its real nature.

When he was affected with the primary ulcer, it would seem that he had not at that time done mischief to any of his patients—probably because he was aware of, or strongly suspected, the nature of his ailment, and adopted the necessary precaution of covering the part; but at the time that I saw the secondary venereal ulcers on his finger, he was certainly ignorant of their real nature, and accordingly it was then that he communicated the infection to a considerable number of his patients. I was totally unconnected with any of the parties in this unfortunate business—chance alone made me acquainted with it in the manner I have mentioned; and I have thought it right to state the particulars which came within my own knowledge, because the corroborating testimony of a witness, totally unconnected with any of the parties, must have some weight in gaining credibility to a fact, which is so contrary to the generally received opinion as to require all the support that can be given to it.

In further confirmation of this conclusion, I shall next adduce an article, extracted from the "Edinburgh Medical Essays and Observations," which, having been written many years before the profession was at all aware of the distinction between primary and secondary symptoms, is on that account fully entitled to credit, as the plain statement of an eye-witness to a curious medical fact.

In Vol. III. Article xxi, page 297, of this work, is an account of a malignant lues venera, communicated by suction, in the city of Cork, in the year 1728, by Edward Barry, M.D., F.R.S.

"A woman in this city, who was commonly employed to draw the breasts of lying-in women, had, probably in the course of her business, received the infection in her mouth; which she either did not suspect, or concealed, till she communicated the poison to several persons of distinction.

"I think this infection was still more remarkable for its malignity, and the quick progress of the symptoms, than for the uncommon manner of its being received. As I had an opportunity of seeing most of the unhappy persons who were thus affected, I thought that a faithful account of its appearance, and the method of cure, which I found successful, might not be unworthy of a place in your essays.

"The nipple first became slightly inflamed, which soon produced an excoriation, with a discharge of a thin liquor; from thence red spreading pustules were dispersed round it, and gradually spread over the breast, and, where the poison remained uncorrected, produced ulcers. The pudenda soon after became inflamed, with a

violent itching, which terminated in chancres that were attended with only a small discharge; and, in a short time after, pustules were spread over the whole body. It finished this course, with all these symptoms, in most persons, in the space of three months. This disorder made a quick and dangerous progress in such who first received it—they not being apt to suspect an infection of this nature in their circumstances. The husbands of several had chancres, which quickly communicated the poison and produced ulcers in the mouth, and red spreading pustules on the body; but such of them escaped who had timely notice of the nature of the disease, before the pudenda were affected. Some infants received it from their mothers, and to the greatest part of them it was fatal.

“When I first mentioned my opinion of this disorder to the midwife of a person whom I visited, she said, the woman who drew her breasts was a few days before, on such a suspicion, examined, at the request of a lady of distinction, before she would make use of her, and was declared free from any such distemper; by which means that lady was unhappily deceived, and was one of the last who received the infection. I ordered the woman to be sent to me, and I observed a small ulcer at the root of her tongue, and a large recent cicatrix on the inward part of the upper lip. She obstinately denied that she ever had any sore there, but was so much terrified when I told her she would certainly rot away, that she begged I would not suffer her to perish if I suspected so much danger. While she was in a salivation, she owned to me and Mr. Osborne, an eminent surgeon in this place, that she had had an ulcer where the cicatrix remained, which she cured by two or three doses of physic and a gargle made of woodbine, and some other ingredients; and said she concealed it because she imputed it only to cold, and was afraid, if known, it might for ever destroy her business and character.

“The woman who communicated this infection to so many had no eruptions on her body; and, by what I could find, the infection never made any progress beyond the mouth. Some women, whose breasts were drawn by her, had never any marks of infection; but, by what I could find, the few who escaped were such whom she attended after the large ulcer on her lip was healed: for, while that continued, the nipple was received into a bed of corruption. But the case of a lady was very remarkable, whose breasts were drawn twice a day by her, when she communicated the infection to all others who came in her way. A violent confluent small-pox seized this lady immediately afterwards, and she never had any marks of infection.

“The activity of this poison was so great, that I immediately directed a mercurial salivation to even such as were but lately and lightly affected, and ordered it to be brought on by repeated unctions, in a small quantity, with a few grains of calomel internally, and continued the salivation five or six weeks.

“I have often observed that, where the salivation easily rises, on the use of the small quantity of mercury, the cure is uncertain,

and the symptoms often return ; and that the same inconveniences often attend a large salivation, accompanied with a great inflammation, from which many other dangerous symptoms also flow.

“The venereal disorder returned to some after a regular salivation, but was entirely removed by the following method, which I made use of to all who had this infection in a violent degree.”

Here follows an account of his treatment by giving the patients large quantities of decoctum sarsæ, and also subjecting them to be sweated in a closed chair or bath:—“When they had bathed in this manner five or six times, I ordered a strong decoction of guaiacum to be used instead of the former, and a few grains of calomel to be taken an hour before they entered the bath ; and in some cases I have directed two grains of the turbith mineral to be mixed with the calomel, which, though continued for a considerable time, seldom affected the glands of the mouth, being determined with such force to the surface of the body ; and, if the expression may be allowed, mercury thus managed produces a salivation through the pores of the skin. When the salivary glands are in the least affected, the use of mercurials is to be omitted till that symptom disappears. I ordered the bath three times in a week ; in some cases repeated it five or six times successively every day, and gradually remitted the use of it.”

I shall not avail myself of the charitable construction put by Dr. Barry on the manner in which this woman contracted the disease—viz: “that she had probably, in the course of her business, received the infection in her mouth”—as this would incline us to think that the ulcer of the lip was a secondary ulcer ; I shall admit that it was a primary ulcer or chancre, without stopping to enquire how it was contracted. It is obvious, then, that the ulcers of the nipples must also have been primary ulcers or chancres, but from these the whole system became contaminated, for we find that pustules were spread over the whole body ; and that these pustules, or that this eruption, had also seized upon the pudenda, we have proved by the statement, “that the pudenda soon after became inflamed, with a violent itching, which terminated in chancres that were attended with only a small discharge.”

This general eruption on the surface, as well as those spots of eruption which appeared about the pudenda, it must be admitted, were secondary symptoms. This account, of the general eruption having seized upon the pudenda, will be corroborated by the experience of every surgeon who has been accustomed to treat the syphilitic complaints of females ; for in them we almost universally find that the pudenda and parts in their immediate vicinity are thickly beset with spots of the eruption, which, however, in general differ from those on the other parts of the body, by being moist, yielding a discharge having the appearance of an ulcerated surface. By the way, it is remarkable that, while this takes place in the venereal eruption of females, we find much fewer spots of the eruption appear on the genitals of men than on any other part of their body. From Dr. Barry’s account, it is plain that the hus-

bands of several of these ladies were infected by having sexual intercourse with their wives, and that the disease which they received was truly syphilitic—for “the husbands of several had chancres which quickly communicated the poison, produced ulcers in the mouth and red spreading pustules on the body.” This surely is a pretty clear account of the primary and secondary symptoms contracted from the wives; and I cannot conceive by what ingenuity the above facts can be explained away, or how it can be asserted that the disease which was communicated to the husbands was from primary and not from secondary venereal symptoms.

Let it be observed, that, at the time when this essay was written, medical men were unacquainted with the distinction between primary and secondary ulcers; and, therefore, when Dr. Barry speaks of *chancres* on the pudenda of the females, we are to understand merely venereal ulcers. It also deserves to be noticed, that at this period no question had been raised as to the power of any venereal ulcer to contaminate: this was then believed to be a property possessed by all and every venereal ulcer. In my opinion, then, we have in this essay as strong traditional testimony as the case can admit of; it is given by a man who had no particular theory or doctrine to support, who seems to have written for the mere purpose of stating facts, and recording an account of the propagation of this afflicting disease in a manner which is so uncommon. The only matters like theories in this essay are his notions of the causes why mercury fails at times to cure the venereal disease.

A very striking instance of the power of secondary symptoms to contaminate and produce the venereal disease is seen in cases of infants infected with syphilis—communicating it, first locally, and then constitutionally, to a sound nurse. I am well aware that Mr. Hunter is of opinion that these cases are not venereal; but I will appeal to the candour and observation of every surgeon conversant with this branch of practice, and who has witnessed cases of this description, and I ask him whether the symptoms in the infant are not exactly such as he has repeatedly observed in the adult. I am certain that the answer will be in the affirmative: I put it to his candour to say whether the secondary affections of the nurse differ in any respect from those secondary symptoms which are the consequence of genuine chancre. Are not the features of the disease precisely the same?—and are not both similarly affected by mercury? If, then, the disease of the nurse so closely resemble that produced by chancre—both being preceded by a local sore—and if the secondary symptoms so closely resemble each other that we are not able to discover any difference; finally, if both be similarly affected by mercurial treatment, how can we dispute their identity?

I am well aware that Mr. Hunter, in his work, has laid hold of some few particulars in which these two diseases seem to differ; but this difference, I think, may be explained without involving the supposition that the disease of the infants and nurse are not venereal. This I shall attempt to do when I come to speak of the venereal disease in infants.

CHAPTER II.

ON THE ADMINISTRATION OF MERCURY.

**Preparatory process necessary—Curative action of mercury is attended with ptyalism
—Regimen to be observed during a mercurial course.**

It will be readily conceded that the efficacy of any remedy in the treatment of disease must, in a great measure, depend on the accurate knowledge which the practitioner possesses as to the most judicious mode of administering it; this position, which is true in respect even to the most simple and innocuous medicine, will be found to apply with peculiar fitness to the use of mercury, when we reflect on the astonishing powers of this substance—its great superiority over every other medicine in the cure of certain forms of disease—the different results it is capable of producing, according to the mode in which it is administered—and above all, when we consider that, in the hands of the ignorant and the injudicious, it will not only fail to remove that complaint for which it had been prescribed, but may induce other diseases of a still more intractable nature, and that it even may, as too often has been the case, cause the sudden extinction of life.

The practitioner about to administer mercury should not only be well acquainted with the doses suited to the age of his patient, and with the probable effects of certain combinations on particular functions, but he should also bear this fact in mind—that unless, in general, he prepare the system by some preliminary attention, so as to adapt or fit it to receive the full benefit of this medicine, he will most probably be foiled in his attempts to remove the disease, and he may even entail upon his patient some other and more serious ailment, and thus perhaps irretrievably injure a naturally good constitution. Such preparative process is particularly required in those diseases, and especially in certain forms of syphilis, in which we consider that a protracted course of mercury may be found necessary.

The older surgeons were strongly impressed with the necessity of some such preparation; and, although I by no means subscribe to all the details of their practice, I yet fully agree in the principle. The preparative measures which were adopted by them were not confined to plethoric and robust individuals labouring under primary symptoms, (such persons were soon reduced by bleeding, purging, warm bathing, and low diet,) but they also very judiciously extended the principle to those cases where the health appeared broken down, and where the venereal disease was accompanied by some morbid state of the system, not necessarily arising from that disease. At the time when I commenced the study of the surgical profession, this practice was not entirely extinct; every venereal patient, on his admission into hospital, was then, as a matter of course, ordered to be bled once, to be purged four times, and to have

the warm bath twice in the first week; and not until all these directions had been complied with, was the use of mercury commenced. In the course of a little time, the practice of bleeding was confined to those cases in which active inflammation attended on chancre or bubo, but still that of purging, warm bathing, and low living, was in all instances strictly adhered to. In cases of secondary symptoms, in enfeebled and reduced habits, I never at that period saw any sort of preparatory process adopted; at present I may say preparatory treatment is considered unnecessary, for I cannot consider as such that plan which is now generally pursued in such cases. For example, when a consultation of surgeons is held on a patient who is emaciated and hectic, with enlarged lymphatic glands in the neck, &c., and that it is decided that he should pursue a course of sarsaparilla and acids, with country air, &c.; I say that such is not a preparatory course, in the true sense of the word, because this plan has been recommended in the hope that it may alleviate the venereal symptoms, or even altogether remove them; it has in fact been ordered as a *succedaneum* for mercury, with some flattering expectation that the patient may thereby be restored to health, and that thus mercury may be totally dispensed with; and, therefore, not with the view of preparing the system more effectually to benefit by its use, or to avoid the dangers which occasionally attend its exhibition.

I do not wish it to be inferred, from the foregoing paragraph, that it is my opinion that mercury should *never* be prescribed for a venereal patient who is much emaciated and hectic, so long as this latter condition of the system shall remain; on the contrary, I shall hereafter show that many such patients can and do bear a course of mercury—and that, too, with the greatest advantage, provided it be conducted with proper care and judgment: but all I contend for is, that if in such unfortunate cases we discover any peculiar morbid state superadded to, but not arising out of the venereal disease, we should then first attempt the removal of that morbid condition, before we venture to commence the use of mercury. If, for example, we venture to administer mercury to a patient who has for many days been troubled with a loose state of the bowels, we run the risk of inducing such a violent and obstinate diarrhœa as will be found intractable, and will speedily exhaust the slender remains of strength; or, if a patient subject to habitual bronchitis should chance to labour under a fresh attack of it, great danger will attend the immediate use of mercury, and therefore some preparatory treatment is required. In fine, I am strongly of opinion that the want of a due preparatory process has, of late years, contributed to bring this valuable remedy into much disrepute; and hence partly it is, that execrations against mercury are heard in every part of Europe; hence has it been accused of, and been condemned for, all those serious evils (and they are manifold and severe) which have arisen from its indiscriminate exhibition—all which ought rather to be ascribed to want of judgment on the part of the surgeon, and to incautious and irregular conduct on the

part of the patient. In proof of this opinion, that mercury does not merit all this odium, I may observe, that, while we hear it condemned by some in reference to the treatment of the venereal disease, we yet daily see its wonderful powers, and hear of its superior efficacy in the cure of many other diseases, over which its influence has been only of late years discovered. Thus, in acute inflammations of the deeper membranes of the eye, in acute inflammation of the joints, and of the serous membranes of the cavities, it is now lauded as a most invaluable remedy.

It is easy to explain why mercury should be generally so successful in other inflammatory diseases, while it so often fails in primary syphilis, which has generally a much less inflammatory character. The circumstances under which it is given in the two classes of cases are totally different: thus, in syphilis its use must be continued for a much longer time than in those acute diseases—as many weeks will be required in the former as days in the latter; again, in these acute inflammatory affections, the surgeon has, perhaps unintentionally, used the very best preparatory process—namely, he has freely bled and purged his patient, has enjoined absolute rest, and has put him on the lowest diet. Contrast with this the course ordinarily pursued with venereal patients. A young plethoric man, who has been pursuing a dissipated course of life, and pronounced by a surgeon to have a venereal ulcer and bubo, is directed to commence at once the use of mercury, either externally or internally; no previous measures are adopted, except possibly one dose of some cathartic medicine—no injunctions as to the necessity of rest and quietness, and confinement to the house—no alteration in his diet—in fact, no attempt to reduce the inflammatory and plethoric state of his system; but because he is young and healthy, and free from any of those diseases which appear in our nosological arrangements, he is therefore considered as in a fit state for the immediate use of this powerful medicine. Could I now induce such of my readers as have had practical experience to recall to their recollection some of those cases of young men who have been thus hurried into a course of mercury, without any preliminary attention to their state of health, or without any particular instructions as to their mode of living, I have no doubt that every practitioner could adduce many instances in which their expectations of a safe and speedy cure have been disappointed; how frequently have they witnessed in such cases, that, although the mercury acted on the salivary system, the ulcer assumed not only a very unhealthy, but even a very novel and peculiar appearance—one which has sometimes caused them to doubt the correctness of their first opinion as to its venereal character, and has induced them to lay aside the further use of mercury! Again, in other cases, how have they been surprised at the inefficacy of this medicine, though the doses of it may have been increased from time to time to a considerable amount, without producing any fetor of the breath, any swelling or ulceration of the gums, tonsils, or palate, or any obvious effect whatever, except an occasional diarrhœa,

which may last for a few hours, and occur at intervals of five or six days!—and when, at length, the accumulation of the mercury in the system has become very great, a train of most alarming and dangerous symptoms suddenly supervened, although not one of its ordinary or salutary effects have been produced. Every surgeon; I have no doubt, must have witnessed the misery that such patients occasionally undergo even in respect to the local disease: the inflammation attending their chancre is sometimes so excessive as to require cold applications, and repeated and often unavailing leeching; the bubo, too, is also often attended with a peculiarly severe pain, of a scalding, burning, or shooting kind, although the swelling and the discoloration of the integuments may be but to a moderate degree. When the purulent collection distends the skin, the sufferings of the patient are almost beyond endurance; and when the surgeon is forced to give it vent, the pain attending the act of opening it is sometimes so acute as to overcome even the greatest fortitude and patience: the fluid in such cases is usually thin pus, mingled with the colouring part of the blood. Although the patient may have derived some relief from the operation, yet still he continues to pass sleepless nights, and most uncomfortable days, from the continuance of pain; even during this state, however, he often possesses a good appetite and a fair share of strength; but no local application succeeds in relieving the local symptoms until the mercury shall have been laid aside, and the general health attended to; then the suitable topical means will soon succeed in improving the condition of the sores, and the system will gradually recover from the several effects of the precipitate and injudicious mode in which the use of mercury had been commenced and continued. I feel certain also that surgeons must have often seen, in cases of patients affected with secondary symptoms, who have been worn down and exhausted with an irritable state of the bowels, induced perhaps, in the first instance, either by a highly stimulating diet, adopted with the view of exciting appetite, or, as in the poorer ranks of life, by ardent spirits, and food of an innutritious nature, that this condition of the intestinal canal has been greatly increased, and even urged on to an uncontrollable diarrhoea by superadding the irritation of mercury during this state of the system generally, and of the bowels in particular. Many of such cases have, under these circumstances, sunk into a state of the most alarming and even fatal weakness, the moment the mercury has made an impression on their irritable and enfeebled frames.

These then are some, but by no means the whole, of the pernicious effects which may be, and which often are, induced by the administration of mercury, when due precaution has not been used to prepare the system for its reception. When speaking of secondary syphilis, I shall adduce some instances of its mischievous effects on many of the symptoms.

Having now, I trust, shown the necessity of some preparatory course of treatment, previous to commencing the use of mercury, I ought next to speak of the mode of administering it; I wish first,

however, to offer a few remarks upon the curative action of this medicine.

When mercury is exhibited for the cure of any other disease, as well as for syphilis, we shall find that its sanatory impression on the disease is cotemporaneous with its action on the salivary system; and that, when the latter effect has not been produced, neither will the former have occurred. Thus, in cases of acute inflammation of a joint, or of the dense membranes of the eye, we find that the progress of the disease is arrested the moment the salivary system becomes affected; and even in cases of other diseases, which cannot be considered as purely inflammatory or acute, the same remark will be found to hold good: thus, in cases of orthopnoea depending on disease of the heart, with effusion into some of the thoracic cavities, and in which we commonly prescribe mercury in combination with squill and digitalis, the patient is not at first sensible of any improvement, but almost invariably, as soon as the gums become affected, he experiences relief; and perhaps the very next morning after this occurrence he tells us, with joy and gratitude, that he is considerably better—that he has passed a night of refreshing sleep, and that he has been able to do what he could not have done for weeks previously; namely, rest in the recumbent posture without any of that distressing and alarming sense of suffocation under which he had previously laboured, and which always supervened the moment he sunk into that position. It is unnecessary to particularise many other diseases in which the same fact occurs; indeed, it may be asserted as the general rule. The contrary, also, will be found equally true; that is, that mercury will not prove serviceable in any disease for whose cure it has been prescribed, when it does not produce its wonted effect on the salivary system. How often has this been verified during that time when it was the fashionable practice to prescribe a course of mercury in all chronic affections of the liver? It then happened, over and over again, that slight delicate females have been subjected to this treatment: friction perhaps has first been tried, and this failing to relieve the complaint, (because it had also failed to affect the salivary system,) the internal use of mercury has then been substituted, or probably combined with the former; thus the medicine has been persevered in, and the doses increased, even to an extravagant degree, but yet withal no salutary effect has been induced; on the contrary, the little remnant of strength has suffered so materially, that at length the mercury had been laid aside, and the friends, as well as the medical attendant of the patient, have had reason to express not only their disappointment, but also their amazement, at the inefficacy of the mercury, of which the patient had taken fully as much as would have sufficed to salivate at least half a dozen young and vigorous men. If, then, it be so very generally found, that, whenever mercury exercises a salutary influence over disease, it at the same time always affects the salivary organs; and if, again, whenever it fail to produce this latter effect, it be also found altogether inoperative in the cure of disease, it is

surely a fair and legitimate conclusion to affirm that ptyalism marks the natural and salutary operation of this mineral.

I am well aware that this doctrine has been questioned by some practical writers on syphilis, but I trust I shall be able hereafter to show that this disease does not form an exception to the above general position. Let it not, however, be inferred, from the foregoing statement, that I would wish to measure the efficacy of mercury by the amount of salivation which it excites; on the contrary, the degree of ptyalism that I am always anxious to attain, is merely an increased secretion of saliva, accompanied by swelling and superficial ulceration of the gums, and sometimes, also, of portions of the lining membrane of the cheeks and lips; this I am desirous of attaining as a sort of index, which denotes, first, that the mercury is acting in a safe and salutary mode upon the system; and, secondly, that it displays that degree of power or energy of action, which will be sufficient to eradicate the disease: so certain do I feel of the correctness of this view, that, during a course of mercury for the cure of syphilis, should this ptyalism be suffered to decline for some days, I should fear that all the additional mercury, which may have been subsequently given in this more feeble manner, would prove useless, that is, unequal to cure the disease. At the same time, I am aware that many surgeons have exerted their ingenuity to devise a mode of administering mercury, whereby ptyalism, or any obvious effect on the salivary system, might be prevented; I have reason to believe, however, that the precepts of such surgeons have not been very generally adopted, and, with most practical men, have fallen into disuse.

The general regimen which patients under a mercurial course should pursue, is a subject of some importance, and one of which I have not spoken, as yet. In former times, it was the custom to have the patient covered with a thick flannel, or woollen cloth dress, and the head even covered with a sort of hood, so that the face only was exposed; he was also confined to a very warm, close room, from which the external air was most carefully excluded. I believe it was Mr. Hunter who effected a revolution in this practice; and this not so much by any forcible argument, as by simply asking a question, which he prefaces by an assertion.

“The manner of living, under a mercurial course, need not be altered from the common, because mercury has no action upon the disease, which is more favoured by one way of life than another. Let me ask any one, what effect eating a hearty dinner, and drinking a bottle of wine, can have over the action of mercury, upon a venereal sore, either to make it affect any part sensibly, as falling upon the glands of the mouth, or prevent its effect upon the venereal irritation? In short, I do not see why mercury should not cure the venereal disease under any mode whatever of regimen or diet.”

While I dissent from the rigid rules of discipline insisted on by our ancestors, during a mercurial course, I do, however, believe that their system was, on the whole, productive of much less mis-

chief than what results from the laxity of modern practitioners, in this respect, who, I conceive, err exceedingly in the contrary extreme. Thus, to permit a strong plethoric young man, with primary symptoms, and who has not undergone a preparatory regimen, to indulge in all the pleasures of the table, to eat a full dinner, and take freely of wine, is only calculated to increase the tendency to febrile action, which, when at all excessive, will counteract the disposition to ptyalism.

With respect to the influence of exposure to the air during a mercurial course, we need only refer to what has been written by various authors, on the benefits of free exposure of the system to the fresh air, in cases of mercurial erethism, and also to the assistance which the practitioner can derive from it in the management of those individuals whose idiosyncrasy renders them very susceptible to the effects of even small quantities of mercury.

Should our patient appear debilitated after the moderate and the desirable degree of ptyalism has been induced, then we may safely allow him a full and generous diet, from which, however, I would still exclude all stimulating food or drink; moreover, if, about this period, the patient's strength fail, or if the local symptoms do not improve as we had expected, we may then combine, with great advantage, bark and opium with the mercury, while at the same time we should reduce the doses of the latter. The experience of hospital surgeons will, I have no doubt, support my opinions on this subject; for they must have observed, on many occasions, that if the symptoms of an out-patient, who is using mercury, should become worse, and that he then be received into the hospital, his complaints have quickly improved, and that, too, while the same doses of mercury have been continued.

I know it may be urged against this strict rule of regimen, in favour of which I have expressed myself, that the daily practice of some surgeons proves it to be unnecessary, inasmuch as they allow their patients free exercise in the open air, and a liberal diet, and yet they are able to effect numerous cures. While I admit this, still I think it must be granted, that surgeons daily meet with many untoward circumstances, and considerable delays in this branch of their practice, that not a few of their patients pass on from one stage of the venereal disease to another; and while some of them are cured in the advanced stages of the complaint, after repeated disappointments and protracted sufferings, many others fall victims to its sequelæ, or are carried off by some of those acute diseases, to which the deranged state of their system renders them peculiarly liable.

When I call to my recollection the results of my own observations on the treatment of this disease, made thirty years ago, and compare it with that of the present day, I think the comparison speaks decidedly in favour of the plan which was then pursued. For some years after I entered on the study of the profession, a surgeon felt himself rather humbled if he allowed a venereal bubo to suppurate; and if secondary symptoms appeared, he was con-

sidered to have mismanaged the case, and not unfrequently lost for ever after the total confidence of his patient. It is true, that at that time mercury was often used in excessive and in dangerous doses, salivations most profuse were excited, and which were attended with all their accompanying evils; but still, on the other hand, the patient who escaped these perils was generally freed at once from the disease. The regimen then was as strict as the medical treatment was severe. Lodging-houses were established in Dublin, solely for the reception of young gentlemen who required to go through a course of mercury; and these houses were always fully occupied—so seldom was it that a young man could, while living among his own family, undergo the severe discipline to which the surgeon of that day thought it necessary to subject him.

But from the time that Mr. Hunter's work on the venereal disease came to be generally read and acted upon by the surgeons of this city, the discipline became not only less severe, but actually as lax as Mr. Hunter himself could wish. Young men, pleased at the removal of these restraints, too frequently overstepped even the moderate bounds which were prescribed for them; and surgeons, finding that secondary symptoms frequently appeared in cases so treated, were glad to adduce Mr. Hunter's theoretical opinions of "disposition to diseased action," and so forth, partly to justify themselves, and partly to satisfy their patients; so that at length, from this, and perhaps from other causes, which I shall not now consider, those cases of primary venereal disease, which, under the old practice, required six or seven weeks for their cure, were, under the new plan of treatment, found to require as many months, or even years. By the former, the disease was really and quickly cured; but by the latter, it is only pursued from one resting-place to another, so that the patient's mind is often kept in a state of suspense and anxiety of mind for very many months—the symptoms disappearing for a few weeks, and then returning; and so this scene may occur over and over again, until, by some lucky chance in the treatment, or in the effects of the medicine, the system shall come to be finally relieved from the disease.

While I freely admit that excessive over-doses of mercury have inflicted the most severe evils, yet I as confidently affirm that, within the last twenty years, the same medicine, when employed in under-doses, or rather when it has not been pushed so as to induce its legitimate action, has been productive of infinitely more mischief; and I feel confident that this position could be supported both by professional as well as non-professional persons, were the effects of the latter practice as obvious and striking as are those of the former; but they cannot be so fully appreciated by the ignorant, and they have not been sufficiently attended to by the profession.

The alarm, which, of late years, has been raised against mercury, as well as the mischief to which it often gives rise when it happens to disagree with the patient, have rendered practitioners not only cautious but absolutely timid and nervous as to its use;

so much so, that as soon as they observe the first unfavourable change in the symptoms, they at once suspend the further use of mercury; some even seem not to be aware that chancre and bubo almost always appear to be worse on the day or two preceding the occurrence of ptyalism; about that time, the chancre spreads somewhat, and the bubo becomes more painful and uneasy. Now this is the very juncture when the disease is, as it were, within the grasp of the surgeon, provided he only persevere in the medicine with prudence; but if, through fear or ignorance, he lay it aside at this moment, he will lose the happy opportunity of expeditiously, and almost certainly, curing his patient; and then he assures him that the mercury is beginning to disagree, and that it cannot be continued any longer with safety. A patient had better not have used any mercury whatever, than have been treated in this way, for the constitution has been disturbed, and febrile irritation has been excited to no purpose; and should the patient be of an unhealthy habit, the local disease may assume a very unfavourable aspect, while the general health may become so much disturbed as to render it unsafe to resume the use of mercury for a considerable time.

A similar mismanagement of mercury in cases of secondary syphilis, will be attended with results fully as unfavourable; and the more frequently the error is repeated, so much the more serious will be the evils consequent thereon. Under such circumstances, the surgeon tells his patient that his case can no longer be served by mercury, and therefore he consigns him to the non-mercurial plan. In this manner, I believe, a very few may be cured, but many more I know have been allowed to sink into an untimely grave, by the slow and silent, but certain operation of the venereal disease, the symptoms of which have become so changed or masked, that common observers could not recognise the features of the original case. No doubt, observation, experience, and sound judgment, are very requisite to enable the practitioner to decide whether those changes, which appear at the critical moment when mercury is about to excite ptyalism, be really unfavourable and alarming, or whether they may be the natural effects of the mercurial action; this, however, is not the only instance which the practice of surgery presents, in which accurate observation, discrimination, and judgment, are required to practise the profession with safety and success; these are qualifications which can only be attained by long and attentive experience; no precise rules, therefore, can be laid down to guide the surgeon at this critical juncture, neither can any words impart to him that practical knowledge, without which he cannot conduct the further treatment of the case with satisfaction to himself, or with true advantage to his patient.

CHAPTER III.

ON THE ADMINISTRATION OF MERCURY.

Modes of administering mercury—Friction—Internal administration—Ordinary effects of mercury on the system—Necessity of paying close attention to the patient, from the time of the first impression of the mercury on the system—Cautions to be observed in the use of mercury—Eruptive diseases consequent upon the use of mercury—Erethismus mercurialis.

I now proceed to consider the mode of administering mercury so as to induce its favourable action on the salivary system, and, at the same time, its sanative effects on disease, particularly on the primary symptoms of syphilis. In order to explain clearly my views upon this subject, let us suppose the simple case of a young man affected with primary venereal symptoms, but in other respects in perfect health. I select such a case because it will require a more lengthened course of mercury than most other diseases do, and therefore more judicious management is necessary; and also because the changes in primary venereal symptoms will often assist us in deciding whether the medicine is acting in a salutary manner, or otherwise, and, consequently, whether it should be persevered in, or discontinued.

I shall first speak of the mode of introducing mercury into the system by friction, because in this method of administering this medicine, its various effects are more clearly and unequivocally exhibited. The patient should be apprised of the necessity of rubbing in each dose of the ointment carefully, but not violently; and this he should do in the morning rather than at night, and for these reasons:—first, the skin is soft in the morning, and will bear friction better; and secondly, the sleep will not be postponed or disturbed, as usually happens when the nightly friction is employed, the patient being fatigued thereby, and thrown into a state of febrile excitement, which is inimical to sound repose.

As to the mode of rubbing in the ointment, the patient should be directed to divide the whole quantity to be used into four parts, and then rub in each portion perfectly and successively, until all are consumed: it is better to apply it to one limb only on each day, as thus that pustular eruption, which is a common consequence of mercurial friction, is less likely to be excited. I prefer making the patient apply the ointment himself, whenever his strength will admit of the exertion, because the friction of his own hand is less uncomfortable, and less likely to produce irritation and eruption, than that of any other person, even though protected by a bladder ever so well prepared.

I do not advise the thighs to be shaved, as many surgeons do, because in a few days, when the hairs grow, and become stiff, more irritation is produced, and thus the tendency to pustular eruption is increased.

During the course of mercurial friction, the patient should wear

the same drawers both by day and night ; he will thus have some portion of the ointment constantly applied to the surface ; some of which will probably be absorbed during the intervals between each friction. When the same part of the body has been rubbed two or three times, it is advisable to wash off the remains of the ointment with warm water and soap, and this ablution should be made the night before the next friction.

When we deem it necessary to employ mercurial friction with a patient who is in a very weak state, or more especially with one who is in a constantly feverish condition, we must direct the friction to be performed by some other person, to whom we should give the following instructions :—The servant should be furnished with a pig's bladder, which, after having been well steeped in warm water, should be turned inside out, then well impregnated and softened with sweet oil or fresh lard. After this preparation, it is to be tied round the wrist of the assistant, and the ointment rubbed by him, according to the directions already given.

The dose for each friction (in this supposed case) should be ʒss. If we are very anxious to induce ptyalism rather early, we may at the same time direct five grains of pil. hydr. to be taken every night at bed time : we may thus act upon the absorbents of the internal, as well as upon those of the external surface, at one and the same time. If we use mercury internally, in cases of syphilis, or other diseases requiring a rather protracted use of this mineral, we may employ either pil. hydr. in doses of five grains night and morning, which is equivalent to half a dram of ung. hydr., or, should we prefer calomel, it may be given in doses of two grains at bed-time, uncombined in all cases, except in such as are likely to suffer by its purgative effect. For it will be found to lose this effect after the second or third dose. But where purging is to be avoided, we should combine with it a small proportion of some opiate.

In ordinary cases, we seldom observe any of the usual effects of the medicine until the fourth day, when, by *interrogating* the patient, we learn that he feels a peculiar taste in his mouth like that of copper or brass, or, according to some, like that of iron ; that this feeling is most distinct in the morning, or when he has remained for some time silent, or without food or drink : at this period he makes no complaint as to his general health, but, on particular enquiry, he will admit that his appetite is not quite so good, his sleep not so long ; that his bowels have a tendency to costiveness, and that he has a little more thirst than usual. All these changes, however, are to so trifling an extent, that they will not be complained of, nor will they ever be mentioned unless the surgeon enquire for them. About this period, too, a very slight mercurial fetor of the breath may be detected, but there is very little alteration in the state of the mouth.

About the sixth or seventh day the ptyalism is fairly established, the gums are swollen, and appear as if inclined to separate from the teeth ; they also present a slight degree of ulceration on their edges, especially in the intervals between the teeth ; the lining

membrane of the cheeks, opposite to the last molares, assumes a leaden colour, and is also swollen, so as to bear the impressions of the teeth; the soft palate also is often swollen and more red than natural, as if it were slightly inflamed; the patient states that his mouth is disposed to fill with water, and that, during sleep, some saliva had flowed so as to wet the pillow; that he cannot chew any firm substance without suffering pain in his teeth, and that a sense of aching and uneasiness in the gums remains for some time after taking food, even though it should be of a kind easily masticated.

From the third to the seventh day, or rather from the time of the first impression of the mercury on the system, until the full establishment of ptyalism, we should pay very close attention to the patient, for during this period he is liable to much suffering and to most danger; and it is at this period that the attentive and judicious surgeon can be of essential service by giving a right direction to the medicine, as well as by counteracting any injurious effect it may produce. Thus, during this critical period, the patient is liable to attacks of griping, frequent desire to go to stool, and tenesmus; these efforts are attended with only slight evacuations, which chiefly consist of mucus, tinged with blood; sickness of stomach and vomiting also often supervene, the skin is hot, and the pulse quick; all which phenomena are explained by the fact that the specific influence of the mercury has taken effect upon the alimentary canal instead of the salivary system. This dysenteric affection so generally appears at this period, that the patient should be forewarned and prepared for it. He should be directed to discontinue the use of the mercury as soon as he feels this uncomfortable effect, and he should be provided with draughts, containing each, *tinct. rhei* ℥i, *tinct. opii. gut.* xx, in any appropriate vehicle; one to be taken after each dysenteric stool. An opiate enema may be used instead of the draught, whenever the stomach rejects the latter. A gentle diaphoresis also should be encouraged by the tepid bath, or by bathing the feet in warm water. In the course of a day or two this febrile excitement will, under this plan of treatment, have somewhat subsided, the bowels will remain free from disturbance, and then we shall generally find that the mouth has become a little more affected; and should we wish to have it still more so, we may resume the use of the mercury, and continue it in such doses as the circumstances of the case shall require.

It is most desirable that ptyalism should be induced, without any severe constitutional disturbance, within the first seven or ten days, as it establishes the fact that the mercury agrees with the individual, and therefore it assures us that it can safely be employed, and that there is every probability of its accomplishing, in this case, as much as mercury can do.

The young practitioner should know, that sometimes the influence of mercury on the system manifests itself by a somewhat different state of the salivary system. Thus it will occasionally happen that the patient, about the usual time, will complain of

some fetor and some soreness of the gums, and yet we do not find any increased flow of saliva after a further lapse of some days. If we now carefully examine the gums, they will be found less soft and less swollen than in the regular form of ptyalism, but their edges will be more ulcerated; indeed, the ulceration of the edges appears to be the only change which they have undergone. Such cases also are attended with rather too much of fever. Should we persevere in the present doses of mercury, we shall fail in inducing ptyalism; the result will be a more severe state of ulceration, and a smart degree of fever. I have seen cases of this sort, in which the mercury was still continued, and this state of ulceration of the gums and the fever were kept up for five or six weeks, until, at length, a stop was put to the further use of the medicine, either by the fever rising to an alarming height, or by the surgeon entertaining an opinion that the disease was cured, because so much mercury had been used, and during so many weeks. This state of things is what the lower orders in Ireland call a "dry course," and it is an effect of mercury which a little experience will discover to be totally insufficient for the cure of the disease; indeed, in some such cases we shall find that all the symptoms remain unmoved and unaltered. This imperfect attempt at salivation may, however, be converted into the full and legitimate ptyalism, by reducing the doses and lengthening the intervals between them, and, at the same time, using such means as are calculated to reduce the rather high degree of fever which attends this peculiar condition of the mouth.

In some few patients, the first influence of mercury on the system is exhibited in the throat, and not on the gums. Such persons, about the fifth or sixth day, complain that they have a sore throat, which they naturally endeavour to account for by saying that they had caught cold. On inspecting the fauces, we discover a degree of erysipelatous blush on the arches of the palate, and some inflammatory thickening of the velum palati: on the tonsil, and generally at its upper extremity, we see a superficial ash-coloured slough; one side only may be thus affected, or both may be engaged in it. I need hardly say, that in such a case a further persistence in the full doses of mercury would not only prove ineffectual for the relief of the venereal symptoms, but would also be attended with considerable danger to life, by inducing a sloughing condition of the fauces.

Under such circumstances we must, for a short time, altogether withhold the mercury, or lessen the doses of it. By proper management, I have seen in some of these cases a regular ptyalism induced, but in a few others I could not succeed in producing this desirable result, the renewed action of mercury reproducing the same condition of the fauces; such cases, however, were conducted safely through the mercurial course by watching them closely, and taking care that the inflammatory state should not be allowed to rise high.

I have been thus particular in stating at what period the surgeon

should wish ptyalism to commence, when using mercury for the cure of primary symptoms, because I am firmly convinced that he cannot count upon a cure, if the salivation occur at a period much different from that above mentioned; for should it be suddenly excited, and even though not very profuse, it will yet leave the disease uncured: perhaps the primary symptoms may be removed by it—oftentimes they are not; but, at all events, the secondary symptoms will not fail to make their appearance, sometimes in full vigour, though often under a more subdued form. This I have seen repeatedly exemplified in cases of iritis, treated by calomel alone, or by calomel combined with frictions. I have also repeatedly seen mercurial fumigations, which were used to stop a destructive ulceration of the throat, produce a speedy and profuse salivation, by which the ulceration has generally been stopped, but in almost every such instance the other venereal symptoms were only checked for the moment, to return with renewed vigour. And here I must remark, that after such sudden and profuse salivations, I have uniformly found the symptoms very unmanageable, and by no means yielding, in the usual way, to a subsequent use of mercury.

On the other hand, if the salivation be very late in appearing, not only will the patient have to lament the loss of so much valuable time, but the surgeon will too frequently find that the system of his patient has been so irritated by this protracted, though moderate use of mercury, that the ptyalism excited at this late period is not borne with the same ease by the constitution, nor is it productive of the same improvement in the symptoms that would have resulted from it, had it come on at an early period of the treatment.

If the above statements be correct, we cannot, then, comply with the wishes of a patient who will tell us, "I will commence the use of mercury at once, although for some days I must be exposed to the weather, dine out, and be out at night; this, however, cannot be any prejudice to me, as there will be but little mercury in my system; but next week I will make arrangements to attend to all your directions." This is a most injurious mode of proceeding, for the great object which is sought for by the administration of mercury, is to be attained by due attention during the first six or eight days: it is during this most critical period that the greatest care, and even nicety, in the management of the case, is required; and it is then that trifling circumstances may divert the medicine from its proper course. Whereas, if the peculiar action of mercury be once established, there is then but little danger of its salutary course being interrupted; so that a man who is under its legitimate influence may be exposed to cold, or may even commit slight excess or irregularity in living, with much greater impunity than one who has only commenced the use of mercury, and on whose system it has not yet exerted any salutary influence. If, in this latter case, its action be interrupted by cold or fever, or any other cause, all will go wrong, the constitution will only suffer a certain degree of irritation, and the disease will continue unsubdued; much time,

therefore, must be lost in allowing these unfavourable effects to pass away, and greater care and judgment must be exercised when next we resolve on resuming the use of the medicine. Therefore, in such cases, when the patient is unable to pay the necessary attention to his health, it will be more prudent to postpone the use of mercury altogether for eight or ten days, rather than commence it under the disadvantages of exposure to cold, or of any irregularities in diet, mode of life, &c.

The remarks which I have ventured to offer on the administration of mercury, for the cure of primary symptoms, will enable us to adapt the use of this medicine to the treatment of other diseases in which it has been found most valuable. Whenever, then, we employ this medicine for the cure of any other disease which is not actually threatening destruction to the texture and functions of the parts in which it is seated, or which does not endanger life, we should observe the same rules and cautions as have been laid down for its use in the treatment of syphilis. Thus, in cases of sciatica; of organic affections of the heart, attended with orthopnoea and effusion into the chest, the ptyalism established on the six or seventh day may be kept up for ten or fifteen days longer, if the obstinacy of the symptoms should require it: whereas, in cases of destructive ulceration of the throat or nose, or in very acute iritis, or in cases of inflammation in a large joint where we dread that suppuration will take place, we can only arrest these serious evils by a sudden and violent action of this remedy. Here we run the chance of exciting profuse salivation by the very rapid manner in which we pour in the mercury. Now, in such diseases, we know by experience that a protracted use of the medicine is not called for, and we are well aware that the progress of these dangerous diseases is at once arrested the moment that the system acknowledges the full action of the mercury, and this check having been once given to the rapid and dangerous progress of the symptoms, we have it in our power by other means to subdue what may have been left uncured by the mercury.

I am thus anxious to state my opinion as to the importance of ptyalism, inasmuch as it is my firm conviction that the most essential part of a course of mercury is to effect this object with as little injury to the general health as possible. Indeed, I feel satisfied that many of those failures which we hear of in the treatment of syphilis by mercury, as well as of other diseases by the same remedy, are to be attributed to an inattention to this very important part of a mercurial course. Without a knowledge of the difficulties which he has to encounter while endeavouring to excite ptyalism, the surgeon will not only be unable to steer his patient with safety, through the sudden and unexpected changes which occasionally occur, but he will also have much less prospect of conducting him to a final and perfect cure. I have no doubt that it is in consequence of the doubts and difficulties which have arisen from this cause, namely, inattention to, or imperfect observation of, the various early effects to which mercury gives rise, and ignorance of the

proper remedial means in each case, that there have arisen of late years so much discrepancy and vacillation in the treatment of venereal disease, and which may justify some in adding its name to the list of those diseases which may be considered as an opprobrium to the art and science of surgery. I must add, that, for whatever disease, whether medical or surgical, a moderate and continued action of mercury may be employed, it behoves the practitioner to be as well acquainted with, and as watchful of, its early effects, as he should be when he employs it for the cure of the venereal disease.

When once the system has been brought under the influence of mercury, there is but little difficulty in the further management of the case; and, in my opinion, there is but little to fear even from its protracted use, provided that mere ordinary attention be paid to the general health, and that care be taken not to allow the action of the medicine to pass beyond the line which has been already pointed out. At the same time, if it be our object to keep up a certain degree of ptyalism, we should be very careful not to allow the action to subside too low, or too soon: we are to be guided by the state of the gums, cheeks, and fauces, rather than by the quantity of saliva which is secreted, and we are not to allow the tumefaction of the former to subside very much, but should occasionally renew the use of the mercury, or increase the dose as soon as we find that its influence begins to decline. The observation of Mr. Hunter is not to be lost sight of:—"The constitution and parts are more susceptible of mercury at first than afterwards; if the mouth is made sore, and allowed to recover, a much greater quantity may be thrown in a second time, before the same soreness is produced; and, indeed, I have seen cases where it could not be reproduced by as much mercury as could be thrown in. Upon a renewal of the course of mercury, therefore, the same precautions are not necessary as at first."

The plan which I have found most successful to reproduce the ptyalism when it has sunk too low, is to give pretty smart doses of calomel, viz., three grains, with one of capsicum, two or three times a day, at the same time that the former doses of the ointment are resumed.

I shall next advert to some of the untoward circumstances which occasionally occur during a course of mercury, and which frustrate our plans, as also those more dangerous effects which often arise in the early period of its exhibition, and at the same time point out the means of avoiding or of removing those obstacles and dangers.

Almost every individual possesses some peculiarity of constitution, or, as it is termed, some idiosyncrasy, which is often very remarkably exemplified in the effects of certain articles of diet, and of medicine, but particularly in those of mercury. As such peculiarity cannot by any degree of foresight be ascertained to exist, it is a judicious rule to observe, that before we commence a course of mercury we should enquire, had the individual ever used mercury on a former occasion, and if so, whether it had produced any peculiar or dangerous effect.

In the first place, we sometimes meet with persons so susceptible of the action of mercury, that ptyalism will be induced even by a single dose. As this almost sudden influence of mercury on the system is very seldom serviceable, especially in syphilis, we should endeavour to obviate it; such a patient should therefore be directed to keep very much out in the open air, to take a nutritious diet, and two or three glasses of wine, daily; the dose of the medicine also should be reduced to one fourth, and an interval of one, two, or even three days left between each, and thus we should endeavour to effect what Mr. Hunter calls "an accumulation of mercury in the system." When we have succeeded so far, we may prescribe larger doses, or shorten the periods between them, so as to excite ptyalism, which will then occur without any unfavourable symptoms. Salivation once excited, must then be directed or governed according to the judgment of the surgeon, whose discretion will guide him as to the quantity of mercury to be administered, as well as to the frequency of the doses, and the length of time it is to be continued.

Again, we meet with cases in which a very slight effect only of mercury is perceptible about the fourth day; in such it will be necessary to increase the power of the medicine; consequently we should increase the quantity either externally or internally, or both. There can be no precise rule laid down as to the extent to which the dose is to be increased; it certainly ought not to be less than one half, and sometimes it may be doubled at once; the former proportion will probably be the better. If the patient have been employing mercury, both by friction and internally, the dose of both should be increased, but if he have been using friction alone, then this should be continued at an increase of one half, and he should take in addition five grains of blue pill every night. If in such cases we did not *early* increase the doses, the system would become familiarised to the mercury, and at a late period we should employ very large doses, and thus run the risk of exciting a profuse and dangerous salivation.

We sometimes find in other constitutions that two or three doses of mercury induce a feverish state of the system, without the peculiar fetor of the breath, or any of those symptoms that indicate the approach of ptyalism: the skin will be hot, the pulse quick, with great general restlessness; under these circumstances, we infer that the mercury is disagreeing with the system, and should we now either continue its use, or increase the dose, we shall only add to the mischief by increasing the fever; and if we still persevere, we may endanger the life of the patient; in general, however, he is soon reduced to such extreme weakness, and is so sensible of becoming daily worse, that he will himself oppose any further use of the medicine. Whenever this febrile state of the system, unaccompanied by any sign of its acting on the salivary organs, is thus early induced, we should at once desist from the further use of mercury, and endeavour to allay the fever by exposure to cold air, and by the adoption of such other means as may be best suited to

the circumstances of each case. Having accomplished this, we must allow some time for the recovery of strength, before we venture to resume the mercury; and when we do so, we should begin with smaller doses, and these at longer intervals, for experience has shown us that the former quantities were such as overpowered the system. We must also endeavour to obviate any febrile action by occasional purging, by tepid bathing, and by the frequent use of mild diaphoretics; we are now to proceed cautiously, increasing the strength and frequency of the mercurial doses, until we gain the desired object, namely, a genuine and wholesome salivation. Here I would observe that this difficulty is not an uncommon consequence of plunging a healthy, vigorous patient into a course of mercury without any previous preparation.

Not unfrequently we meet with individuals who appear to evince an obstinate resistance to the effects of mercury without having any fever induced. Such patients, when questioned on the subject, inform us that they had a slight mercurial fetor on the second or third day, that it did not continue longer than for a few hours, that they do not now find any effect except an increase of appetite, there is no fetor of the breath, no restlessness, no febrile excitement; in a word, the medicine seems to have made not the least impression on the system, excepting perhaps a slight improvement in the appetite. The surgeon now increases the dose of ointment, but without any sensible effect, and then perhaps suspecting that the external absorbents are not in a state of sufficient activity, endeavours to ensure the full operation of the mercury, by directing some favourite preparation for internal use, while he still continues the external application; yet after six or eight days' trial of this combination, he is surprised to find there is no impression made on the system, except, perhaps, some slight emaciation. Under these circumstances, too, it generally happens that the chancre, or whatever the original disease may have been, pursues the same steady, quiet course as we observe when it is left entirely to itself. What is the practitioner to do in such a case as this? There is a choice between two courses only; one is to relinquish the use of mercury, or at least to reduce the dose; the other is to increase the dose, from the idea that those hitherto administered had been too small and too weak for this patient. When the latter course has been adopted, I have known two drams, and even half an ounce of the ointment, ordered to be rubbed in each night and morning, and at the same time large doses of pil. hydrarg., calomel, or hydr. calcinat., given internally for some days; the result of this practice has been, that in some cases it has produced that general weakness, and that tendency to faintness which marks the approach of erethismus. The surgeon, alarmed at these symptoms, decides on suspending the use of mercury; to this the patient readily assents, though at the same time he expresses his disappointment at the inefficacy of the practice which has been pursued, as well as his regret at the time which has been lost.

In some of these cases, however, we find that these alarmingly large doses of mercury do excite a ptyalism; but not that gentle, manageable kind which it is our anxious wish to obtain, but rather a sudden, a violent, and an ungovernable action, which overwhelms the system and threatens destruction to life. The day preceding the appearance of this violent salivation, the patient announces its approach by informing us that he was feverish and restless the preceding night, that he has great headache or tormina, or dysenteric dejections from the bowels; on the following days his cheeks and lips are enormously swollen, there is a copious and incessant flow of saliva, and the tongue is protruded and swollen, the speech is impaired, and deglutition is so impeded that he cannot even drink without much difficulty. Hemorrhage from the gums to a pretty large amount in many instances occurs repeatedly; the tongue continuing swollen and protruded; its edges, more particularly on their lower surface, become indented and ulcerated from the pressure of the teeth. When awake he hangs his head over some vessel to receive the saliva, which flows copiously and incessantly; and when overcome by fatigue, he attempts to sleep, the saliva still flows and bathes his pillow with a fetid moisture; his sleep is broken and unrefreshing, and is frequently interrupted on a sudden, by an alarming sense of suffocation, induced partly by the swelling of all the salivary and mucous structures about the mouth and fauces, and partly by the accumulation of the viscid saliva which he is unable to swallow. After two or three weeks passed in this way with but little alteration, the saliva at length becomes more thick and ropy, the swelling of the face, tongue, and fauces subside, and the patient feels a strong desire for food, but is totally unable to take any in a solid form, and he suffers exquisitely in attempting to swallow any, even the blandest fluid; and thus he is harassed on the one hand by a craving for food and nourishment, and on the other by the apprehension of acute pain attending every attempt at mastication or deglutition. At length, however, the swellings subside, the ulcers of the mouth heal, and a general improvement in the health occurs; yet even then he often has to lament the continuance of some of the various and serious effects which the excess of mercurial action seldom fails to excite, such as loosening of the teeth, pain, and even caries and exfoliation of the alveoli, or of the jaw bone, sometimes the tongue contracts adhesions to the cheeks, &c. &c. It will naturally occur now to enquire, can the patient be assured, as some recompense for all the sufferings he has undergone, that the disease for which the mercury has been administered is cured? In many cases this benefit has been gained, though doubtless dearly purchased; but in many other instances, the surgeon, as well as the patient, observes with regret, and even with dismay, that although the chancre has nearly healed, yet during the last few days it has remained stationary, and also that there is more surrounding hardness than is consistent with the healthy action in the part. It would be needless to com-

tient on the judgment or the feeling of that practitioner who could under such circumstances recommend the patient to resume the use of mercury.

It is fortunate for mankind, and for the character of surgery, that we possess the means of avoiding many, if not all these evils, by a due attention to certain principles; in the first place, when we learn, on due enquiry, that the system of our patient had, on former occasions, been nearly insensible to the action of mercury, when administered in the ordinary doses, we must conduct the plan of treatment according to such rules as experience has proved can generally, even in such habits, excite ptyalism with ease and safety, and only to such a degree as can be perfectly controlled. In such habits, then, we should employ mercury by beginning with smaller doses than in ordinary, and at longer intervals, or, if we have already commenced with the ordinary doses and periods of administering, we should not obstinately persevere in the use of this medicine, but should purge the patient repeatedly, enjoin low diet, and the frequent use of the tepid bath. It has sometimes happened that, during the employment of these last-mentioned means, a safe and mild ptyalism has supervened a few days after the mercury has been laid aside. This apparently anomalous fact is no weak proof that the cause of our failing to produce the desired effect in the first instance, was owing to the mercury having been administered in an injudicious, and, as it were, in too forcible a manner. But if with this treatment no signs of ptyalism should appear, we must still persevere in the same constitutional means, until we conceive that the system is totally free from all mercurial impregnation; to induce this state may occupy twelve or fifteen days. We then commence a new course of mercury, and, taught by our former experience, that full doses of the medicine failed to produce the desired effects, we now direct it in very small doses, but at the same time we persevere in the same constitutional remedies as before; after a few days passed in this way, we are sometimes pleased to find the signs of an approaching salivation gradually advancing in the very manner we are so desirous to effect. It appears to me, that this very precept which has been just inculcated, is the great secret which will serve to guide us in the management of those cases which have hitherto often excited great uneasiness in the mind of the surgeon; and it is a remarkable fact that this obstinate state of the system to admit of the influence of mercury, is not unfrequently met with in those very patients who on former occasions had been salivated rather too quickly with the ordinary doses of mercury, and that too by the very same surgeon who is now so baffled in his attempts to produce the same effect. If surgeons of much practical experience will endeavour to recall to their recollection all the circumstances of such cases, I believe they will find, that on the latter occasions in which they had to treat such cases, they were very anxious that the effects of the mercury should be quickly established; now, in my opinion, this very anxiety, by inducing the surgeon to urge the mercury too freely,

has been one source of its failure, and of the disappointment of his surgeon.

In the course of my practice I have met with eight or ten individuals who appeared to be wholly exempt from the influence of mercury as a sialogogue, and yet I must admit that these persons were cured of their venereal complaints; and it appears a remarkable fact that their primary symptoms yielded exactly in the same manner, though at later periods, as in those patients whose constitutions evince the influence of mercury on the salivary system. The greater number of these irregularities or peculiarities to which I have alluded were met with in one family of five sons, in each of whom I experienced the same constitutional character or property of resisting the salivating influence of mercury; each of these young men had been under treatment for venereal symptoms more than once, and had been on each occasion under the care of a different surgeon, so that the failure of exciting salivation, or making any impression on the salivary system, could not be attributed to any peculiar mode of management of mine, but solely to the idiosyncrasy of these individuals: I may add, that each of these young men so far bore mercury well that they did not suffer any feverish excitement, loss of appetite, severe dysenteric attack, or nervous debility, from its use. Such constitutions, I presume, are very rare indeed.

I have not any particular remarks to offer as to the respective merits of the various preparations of mercury. In my own practice I have confined myself to a few of those which I considered the least likely to disturb the stomach and bowels. I have long thought that if as much talent and industry had been applied towards learning the best mode of administering mercury, and of regulating its effects, as have been employed in compounding new preparations of this mineral, we should not at the present day be in such uncertainty, and even ignorance, as to the best mode of conducting the treatment of the venereal disease.

On the manner of using fumigations I shall offer merely a few remarks.

In the first place, I believe it is an erroneous opinion to suppose that ptyalism can be excited by mercurial fumigations, applied to the sound skin only. I have frequently seen it thus applied without producing the slightest effect. When it has appeared to have excited ptyalism, I fancy that this was caused by some portion of the fumes passing into the mouth and throat. When directed upon an ulcerated surface, it will often produce this effect; and I need not add, that when applied for an ulcer in the throat it will generally cause a pretty smart ptyalism in the course of three or four days. The process of fumigation may be conducted in an easy and comfortable manner by directing the intended dose of cinnabar, or gray oxide of mercury, to be mixed with melted wax, and with a cotton wick be moulded into a small candle. This may be stuck on a common plate, and then burnt under a curved glass funnel, which is to be raised about an inch from the plate. By conducting

the process in this way, we are certain that all the mercury is consumed, which is but seldom effected in the ordinary mode of throwing it on heated metal; the fumes, too, are thus more gradually brought into contact with the diseased surface; and the patient, if fatigued, may blow out the candle and suspend the process until he feels himself able to resume it.

As to the general directions which the practitioner should give his patient, from the time the mercurial course has terminated until he is able to resume his usual avocations, I consider the principal caution to impress is, to avoid exposure to wet or damp, to cold, or to night air; the bowels should be attended to, and an occasional tepid bath may be enjoined, more particularly as this advice usually accords with the patient's feelings, there being a vulgar, but a very general impression that it is useful in taking the mercury out of the system. Patients, after mercury, are often delicate, and more subject to cold, hence a great liability to rheumatic pains, and hence I believe to guard against exposure to cold is the best advice can be given to those who are recovering from a mercurial course. It is a matter of common observation, that persons after a mercurial course not only recover their flesh very quickly, but even manifest a great tendency to corpulency.

Of late years surgeons have become very well acquainted with a peculiar eruption which is occasionally induced by the use of mercury; this affection is named erythema mercuriale.

It was, I believe, first described by Drs. Alley and Moriarty, of this city, and more lately and fully by Mr. John Pearson. Of this affection I shall in the first place remark, that we may observe some slight indication of an approaching pytalism at the very time that this rash appears. It is therefore to be looked for in the early periods of the mercurial course. Sometimes it scarcely attracts the attention of the patient for the first two days, and not until the uneasy sense of itching which it excites shall have deprived him of a night's rest, and then, when he complains first of it, it may be found widely spread over the limbs and body. During the earlier period of a mercurial course, therefore, we should frequently examine the surface of the body, more particularly the angular fold at either groin, as also those between the scrotum and each thigh; for it is in these situations that this eruption usually makes its first appearance, in whatever form mercury be used. On the slightest symptoms denoting the approach of this affection, the surgeon should instantly discontinue the mercury, purge the patient, and, should the disease advance farther, he should expose him to the open air as freely as the state of the weather will permit.

The degree and kind of fever which attends this eruption, is very various, and seems to be influenced partly by the previous habit and constitution of the patient, but still more by the severity and duration of the eruption. I could not find that any particular type of fever necessarily or even generally accompanied it. Indeed, unless the disease be severe, we take no note of the fever, so very slight is it, and so little different from that which attends the

ordinary action of mercury when inducing ptyalism: and here I would remark, that instances of a severe case of this disease are so rare, that I have not met with more than one continuing beyond eight days, during the last three years. In a word, it seems to me that the severity of this disease has been owing to the eruption having escaped notice, and to the use of mercury having been continued for two or three days after the rash had appeared, rather than to any peculiarity of constitution. However, we must expect now and then to meet with a rare instance of a severe case. The treatment of the fever in such cases must be regulated by the existing symptoms.

With respect to local treatment, I believe that dusting the excoriated parts with any of the mild drying powders, will be found to afford as much relief as any other application. Sometimes the application of cloths, wetted with the black wash, has procured relief, and has appeared to promote the formation of cuticle. In a very severe case it will be necessary to have the sheets in which the patient is laid prepared so as to prevent them from sticking to the skin; I think that this is very effectually done by a mild ointment of rather a stiff consistence. The common one, made of equal parts of suet and bees' wax, spread as thin as it can be spread by holding the spatula on its edge, will answer extremely well. I do not pretend to say that some other composition may not be discovered which will better promote the healing of the excoriated surface, but whatever it be, I should recommend it to be made of a firm consistence, for the softer ointments, by the heat of the body, are found to run quickly through the sheets, and consequently to leave the surface which is applied to the body nearly dry.

I may next remark, that an obvious amendment takes place in the symptoms of the venereal disease, on the first appearance of this eruption, and that in a degree more striking than that which attends so slight a degree of ptyalism.

What is most worthy of remark is this, that we never find this eruption to make its appearance while the system is under the influence of ptyalism. So that, after we have ptyalism fully established, we may dismiss all our fears on account of this rash. But let us not be lulled into a false security merely because this symptom may not appear in the early part of a mercurial course: for in some instances it does not appear until the mercury has been used for a considerable time.

I recollect the case of a young woman affected with an induration of one of her breasts, for which I had directed small doses of pil. hydr. combined with extr. conii. No sensible mercurial effect having been produced at the end of three weeks, I increased the dose of the pills; the result was very speedily a slight degree of ptyalism, and with it very full eruption of mercurial erythema, which proved tedious, obstinate, and alarming.

In this case it is obvious that the eruption attended that slight febrile excitement of the system which mercury so generally occasions when it is just about to act on the constitution. During

the first three weeks of its use, the mercury had not produced any sensible effect, and therefore had not excited this eruption. We may in fact declare, that at whatever period of a course of mercury the mercurial fever is *first* suddenly excited, there is danger of the erythema. Hence it should be a rule with those who are conducting a course of mercury, to watch carefully the earliest effects of each increase in the doses of the medicine, and to question the patient minutely, that he may get the earliest notice of the presence of this affection. When once the first burst of mercurial fever is over, and ptyalism has been fairly established, then the surgeon may carry on the mercurial process to any length of time necessary, (provided he do not allow the action of the mercury to subside,) and yet be under no apprehension of an attack of this rash. The following case is well deserving of attention :

Oct. 22, 1807, — Burrows, a dragoon, was admitted with a chancre on the frænum; on this and the succeeding night he rubbed in half a dram of mercurial ointment, and on the morning of the 24th he was found affected with mercurial erythema; this attack quickly subsided, without the use of any other medicine than the *mistura salina diaphoretica* of the hospital.

On Nov. 4th, he was ordered calomel gr. ij. sing. noct.; this he continued until Dec. 4th, when he was directed to take the same quantity mane et nocte. On Dec. 5th, mercurial erythema again appeared; the mercury was laid aside and resumed on Dec. 19th. Calomel gr. ij. omn. nocte, which dose he continued until Dec. 26th, when he was discharged cured.

I need not point out how small the quantity of mercury was which excited the first attack of the disease in this case; but it is worthy of notice that when the dose of calomel was doubled on Dec. 2d, it produced another attack of this affection, although his system had been for twenty-eight days accustomed to the simple dose; hence I infer that the attack of this eruption is produced, and is to be looked for whenever the mercurial impetus or fever is expected; whether at the commencement of the mercurial course, or at a late period, in a protracted use of mercury, whenever the dose is quickly increased.

It may not be amiss to observe that on the declining of the first rash the chancre improved; that it remained stationary, or nearly so, during the entire period of his taking the single dose of calomel, and that it healed very rapidly, as the second rash began to subside. This case also proves, that the internal as well as external use of mercury will excite this affection.

There are some persons whose skin will become affected with this irruption by an inconceivably small quantity of mercury, such as a single blue pill, or a few grains of mercurial ointment which may have been used perhaps for the mere purposes of cleanliness. It may be asked, how are we to manage the case of such an individual when affected with syphilis, for we are told that this cutaneous disease is worse than that for the cure of which the mercury is required; it happens, however, fortunately, that this peculiarity

of constitution is very rare, and it is a still more fortunate circumstance, that we have it in our power to bring such a system into a state which will bear whatever quantity of mercury may be required for the cure of even the most obstinate form of venereal disease. The plan to pursue in such cases is this: in addition to the purging and warm bathing which have been alluded to before as a judicious preparatory course, we should enjoin the patient to wear lighter clothing than usual, to exercise in the open air, during the greater part of the day, to keep the windows of his sitting room pretty constantly open, to keep on light covering at night, to live abstemiously, and on food of the least stimulating quality. The mercury should be administered at first in extremely small doses, and at long intervals; by degrees the former may be increased, and the latter shortened, in proportion as we find the medicine to agree with the system. By this sort of management I have treated some such individuals, both for primary and secondary symptoms, and have at length brought them to bear the fullest doses of mercury. No doubt this plan or process is very tedious, but it is a certain mode of curing the disease, and is free from the risk of inducing this cutaneous affection, which is certainly among the most formidable effects of mercurial action.

The remarks which I have offered on the mercurial erythema, will apply only to the generality of individuals who are subject to it, and by no means to those (fortunately) very rare cases in which the susceptibility to this disease is so very great that it is constantly excited by the smallest portion of mercurial medicines. Let us take the following as an example.

Mr. R. applied to me, 12th August, 1813, for the cure of a chancre. I had treated him in 1810 for a similar disease, and was then made fully acquainted with his extreme tendency to mercurial erythema. Having premised a tepid bath, and some active purging medicine, I commenced by directing a pill of hydr. acet. gr. ss. and pulv. antim. gr. ij. to be taken every night. On the second day a slight rash appeared on the inside of his thighs; of course the mercury was withheld for a day. No improvement in the chancre attended this eruption. The pills were continued sometimes every day, sometimes every second day, (according to the appearance of the rash,) until the middle of September, when the chancre took an unfavourable turn, and showed a tendency to slough. Then the mercurial medicines were entirely discontinued. The rash having disappeared for four days, the state of the ulcer induced me to recommend the ordinary black wash (calomel and aq. calcis). This had been applied for one day only, when the rash reappeared, and with increased severity. On resuming the mercury on Oct. 3d, I directed hydr. acet. gr. ss., and extr. cicutæ gr. i. No rash appearing, the dose of the pills was doubled: the rash appeared on 11th Oct. After this the dose was cautiously increased to three, and ultimately to four pills per diem. The chancre was very slow in healing, but was completely healed on the first of November. The mercury was continued some days longer, although a slight return

of the rash again obliged us to desist for a day occasionally. During this lengthened course of mercury Mr. R.'s general health continued good. No ptyalism was induced; the gums were not made sore, but the inside of the cheeks assumed a leaden colour, and became a good deal swollen during the last fortnight of the treatment.

Mr. R. gave me the following account of the effects of mercury on his system. Previously to the year 1806, he had used mercury for cure of a chancre, and did not then experience any but the ordinary effects from the use of this medicine. In 1806, he again had occasion to use it for cure of a chancre, and then he employed it both internally and externally in very large doses. On this occasion it did not affect his mouth; but immediately after he had laid aside the medicine he was attacked with mercurial erythema, which affected him in a very severe and dangerous degree. Since that period (and never before) he has experienced an extreme susceptibility to the action of mercury in producing this rash; for example, a very small portion of mercurial ointment rubbed on the pubes, for the purposes of cleanliness, has more than once produced it. A grain of calomel combined with purgatives has had the same effect.

In this case I would remark, that the venereal symptom did not improve on the appearance of the rash as it does in less susceptible constitutions. The mercury had not the effect of producing ptyalism, though used for such a length of time. The effects of the topical application of black wash affords the strongest proof of the great susceptibility of this individual.

We should carefully distinguish between erythema mercuriale and another, but more partial, eruption arising from the use of mercury. They both come on under similar circumstances; both seem to be excited by the first impression of mercury on the general system. Our attention is attracted to this latter eruption by our patient informing us that he fears he has got the itch—that he could scarcely get a wink of sleep for one or more nights preceding. He then exhibits on his hands and wrists an eruption beginning with small but very distinct red papulæ, some of which, in a more advanced stage, have vesicles on their apices: they chiefly occupy the anterior surface of each wrist, and of the fore-arm half way up to the elbow; the backs of the hands and fingers are also thickly beset with them. On first view, this eruption closely resembles a form of itch, in which the vesicles are small; but, on more careful examination, you discover that the clefts between the fingers are altogether free from the former, while they are known to be the principal seat of the latter. This eruption is accompanied by a slight degree of fever, and generally by marks of commencing ptyalism.

I cannot say what changes or effects on this eruption would be produced by persevering in the use of mercury, because all the patients in whom I witnessed this symptom were also affected with a smart degree of fever, and complained so bitterly of the itching

and of the restlessness caused by it, that I felt afraid to go on with the mercury until the irritation of this eruption had subsided. A few days' use of the antiphlogistic regimen, and abstinence from mercury at the same time, were sufficient for the desquamation of the pustules, and the removal of this rare effect of the mineral.

I need hardly observe that this eruption differs from the mercurial erythema, by the early appearance of the vesicles—by the eruption being much more distinct, and less thickly set in the skin—by the parts of the body which it affects, and, we may add, by its not extending to the other parts of the body, and not seizing on the angles of flexion in the limbs, where two skins occasionally lie in contact with each other. I suspect this effect of mercury is observed only in cases where the patient is using mercurial frictions. Here, as well as in mercurial erythema, we observe a decided improvement in the primary symptoms uniformly to occur.

Having for some time noticed this eruption only among the soldiers under my care in the hospital, I at first suspected that it was produced in a great degree by the oatmeal diet, to which they are so much accustomed; but subsequent observation has removed this error, and convinced me that it is attributable solely to the use of mercury. Of course the use of mercury must be resumed as soon as the itching has ceased, and the eruption begins to desquamate.

Another effect of mercury, allied perhaps to the foregoing, which the surgeon should watch for, is an excoriation of the skin on the corresponding surfaces of the scrotum and thighs. If this be discovered in its commencement, it will be seen as an excoriation in the very angle between the thigh and scrotum; from this it spreads over the entire extent of the opposed integument of these parts, and a profuse discharge of a very fetid nature takes place.

We cannot well imagine a more distressing state than that of a patient labouring under this affection; at least, no persons more pathetically lament their condition. Not only are they deprived of sleep by day and by night, but they cannot attempt the slightest movement in the bed without inducing severe pain and agony, and they most earnestly solicit some relief even of a temporary nature. It should also be carefully remembered that in some instances, in addition to the parts already mentioned, this disease will also affect the skin in the vicinity of the anus, where the integuments of the nates lie in contact with each other. Occasionally, too, we meet with instances where this disease affects only the skin in the vicinity of the anus, while the scrotum and adjacent skin of the thigh remain perfectly free.

The degree of fever and suffering attendant on this excoriation is so very severe, that we must at once relinquish the use of mercury. If the patient, through downright stupidity, or from an anxiety not to disturb the course of treatment, should conceal his sufferings from the surgeon for one or two days, the continued use of mercury will have the effect of aggravating very considerably both his fever and his local sufferings, but it does not seem to make the excoriation spread to other parts.

When this excoriation takes place, we do not find that the venereal symptoms are improved; they sometimes remain stationary, but more frequently they become in a slight degree worse, and they improve in proportion as the excoriation goes on to heal.

The duration of this affection varies from eight to fifteen or twenty days. For the relief of all these sufferings we find opium unavailing; it fails to procure any continued sleep. The antiphlogistic regimen scarcely moderates the fever. The most immediate and most effectual relief is procured by local means—the most efficient of which is dusting the excoriated parts with equal parts of lapis calaminaris and starch, very finely levigated; this is to be laid on pretty thickly, and then a fold of old linen interposed between the two adjacent skins. Another application, which often procures immediate ease, is the black wash of *aq. calcis* and calomel; the affected parts are to be kept asunder by lint constantly moistened with this lotion.

The following case affords an example of this effect of mercury:—

Dennis Dempsey, *æt. ann.* 20, admitted, Dec. 13th, into Stevens' Hospital, No. 11 ward. The penis and scrotum are much swollen, red, and excoriated; the prepuce is particularly engaged in this swelling, causing a very great enlargement of the anterior extremity of the penis. On the lower surface of the prepuce are several superficial ulcers; a number of similar ulcers occupy the skin covering the body of the penis. Excoriations also exist between the scrotum and thighs, obviously caused by want of cleanliness. He is pale, weak, and emaciated; has had ulcers within the prepuce for some weeks past.

From 13th to 30th December he used black wash, tepid bathing, and *pulv. antim.* The inflammation and excoriation having been then quite removed, he was ordered *ungt. hydr. fort.* 3 ss. *om. n.* and *pil. hydr. gr. v. om. n.*; by these his mouth was made sore in six days. On the 7th, the mercury was laid aside because his mouth was sufficiently affected, and more especially because he complained of soreness about the anus. On examination, the surface of the skin of the nates on each side of the anus, and from this along the perineum, appeared raw, wet, and red; and yet it could not be said to be excoriated, as there was no appearance of the want of cuticle. On 20th January, this affection of the skin having entirely ceased, I again put him on the use of mercury, in the same doses and of the same preparations as before; and on 31st January (in eleven days), his mouth again became very sore, with considerable ptyalism; indeed, the action of the mercury proved more severe than I had wished. Yet, on this latter occasion, there was not the least sign of a return of the excoriation and discharge. He was dismissed cured on 21st February.

I have never seen this effect of mercury in any patient, except when I thought the action of the mercury was too high; I do not pretend to say that too high an operation of mercury is always attended by this effect—I only mean to call the attention of the pre-

cession to this, as one of the marks by which they may know that mercury has made too severe an impression on the system. It is satisfactory to observe that a repetition of the same forms and doses of mercury may be resorted to without producing the same unpleasant effects.

The occurrence of each of these eruptions points out to us the necessity for suspending the use of mercury; but, because the patient has already suffered in this manner, we should watch with more anxiety the earliest opportunity for resuming its use. Should we wait until *all* the constitutional tumult raised by the mercury has entirely subsided, we shall not only require a greater length of time, and a larger quantity of mercury, to reproduce it, but, by too long delay, we may run the risk of having our efforts to effect a cure again interrupted by a recurrence of the very same symptoms. I have more than once witnessed the ill effects of this mismanagement. I have known cases of mercurial erythema produced by the first three or four doses of mercury; the surgeon then delays to resume the use of mercury too long after the fever had ceased; at length he begins it by employing small doses, and, through fear of reproducing the same state, continues these small doses too long, until, both he and his patient being tired of the delay, he finds it necessary to venture on larger, perhaps on double doses; and the new impetus of mercury, occasioned by its exhibition in these quantities on the system, produces a renewed attack of erythema.

Let us then bear in mind these facts: that each and all of these untoward effects of mercury are owing to the first impression of this medicine on the system; that, on the subsidence of this state, the mercury may be used as freely and as long as can be required for the treatment of any venereal symptom, (or indeed for the cure of any disease curable by mercury,) without the danger of reproducing the same condition. Let us then, during the early period of a mercurial course—say from the second to the twelfth day— anxiously watch and guard against these untoward occurrences; but, as soon as we have brought the system once fairly under the influence of this medicine, let us dismiss all fears and anxiety on this head, and now direct our whole attention to the changes in the venereal symptoms, to the degree of salivation, and to the strength and general health of our patients. The salivation once fairly established, we may consider ourselves as having escaped the chief dangers of a mercurial course, and as now being on the high road to a certain cure. We now may be confident that the mercury will not act (as it too often does) as a poison, instead of its proving one of the most active and beneficial remedies in the *materia medica*.

Of all the dangerous effects which may result from the use of mercury, on the occurrence of ptyalism, the most alarming is that which has been so well described by Mr. Pearson, under the name of Mercurial Erethismus.

“This state is characterised by great depression of strength, a sense of anxiety about the præcordia, irregular action of the heart,

frequent sighing, trembling, partial or universal; a small, quick, and sometimes an intermitting pulse; occasional vomiting, a pale contracted countenance, a sense of coldness, but the tongue is seldom furred, nor are the vital or natural functions much disordered."

Again he adds (page 158)—"The gradual approach of this diseased state is commonly indicated by paleness of the countenance, a state of general inquietude, and frequent sighing. The respiration becomes more frequent, sometimes accompanied with a sense of constriction across the thorax; the pulse is small, frequent, and often intermitting, and there is a sense of fluttering about the præcordium. When these or the greater part of these symptoms are present, a sudden and violent exertion of the animal powers will sometimes prove fatal; for instance, walking hastily across the ward, rising up suddenly in the bed to take food or drink, or slightly struggling with some of their fellow patients, are among the circumstances that have commonly preceded the sudden death of those afflicted with the mercurial erethismus."

I imagine that, in general, this dangerous effect of mercury comes on suddenly, and is actually established before the surgeon has due notice of its approach. It may, however, be useful to observe, that I have very frequently remarked this affection to have been accompanied with an intense desire for some acidulated drink; and, although the patient remarks that a slight exertion induces palpitation, yet his countenance remains unaltered, or it may perhaps be somewhat paler than usual.

Although palpitation of the heart is the prominent symptom in this disease, we are to consider it only as one of a series of those effects which mercury produces when it acts as a poison, and not as owing to any peculiar tendency to injure that vital organ; for when mercury acts favourably on the system, it is so far from producing any specific bad effect on the heart, that in diseases of this organ attended with anasarca, orthopnoea, and effusion into the chest, it affords considerable relief; so much so, that the patient himself acknowledges its utility as soon as the gums become affected, by joyfully announcing to us the glad tidings that he is now enabled to lie down, and even to enjoy sound sleep. Erethismus, then, is caused by mercury acting in the manner of a poison on the constitution. I never knew an example of its occurring after ptyalism was fully established: if a patient once have a regular sore mouth, we may continue the use of mercury to an indefinite period, and in any doses, without the risk of producing mercurial erethismus. When I say this, I speak of what accords with my own observation of this affection; for I am aware that Mr. John Pearson says the subjects were men who had nearly, and sometimes entirely, completed their mercurial course. Now, according to my observation, this affection comes on at a late period of a mercurial course, only in those cases where an increased dose has at length been employed with a view of inducing ptyalism, or where the ptyalism was slow in coming on; or where that which

had been first excited has been allowed to subside, and that we are endeavouring to renew it, or rather to reproduce it. I have never seen any instance of its affecting a patient who had entirely completed his mercurial course. Indeed, I feel perfectly confident that it will not affect any person while he is in a state of moderate salivation. I am aware that now and then instances have occurred where mercury has appeared to lie dormant and inactive in the system for two or three weeks after it has been altogether laid aside, and that after this internal ptyalism has come on. I imagine that, when mercurial erethismus attacks men who had entirely completed their mercurial course, it must have been in some one of those very rare instances.

The treatment to be pursued in a case of this formidable disease should be as follows: first, at once discontinue the use of mercury, and charge the patient to change his dress, and to lay aside every article of it which can be in any way impregnated with that mineral; also, caution him to avoid any, even the slightest exertion—such as getting out of bed without assistance—for we know by experience that, under these circumstances, a patient may sometimes expire on making any slight muscular effort. In the next place, we should exhibit cordials in small but frequent doses; but, above all, we should expose him, in the horizontal posture, to the free, open air, *both during day and night*; we need entertain no apprehension of any of those injurious effects which exposure to cold so commonly induces; it would appear as if the present febrile state of the system suspended the ordinary effects of exposure to cold, or at least enabled the system to resist them.

If this treatment have proved successful in rescuing our patient from the imminent danger in which he was involved, we must be careful not to resume the use of mercury for two or three weeks at least—and not even then, unless his health and strength are perfectly restored; and when we have determined to have recourse to it anew, we should observe the following precautions:—We should use the medicine in smaller doses than those which were used when the erethismus appeared; we should interpose occasional purging, allow the patient occasionally to take mild exercise in the open air, and use every effort suitable in his state to direct the action of the mercury to the salivary system, so as to induce ptyalism.

CHAPTER IV.

ON CHANCRE.

Although every surgeon must admit that Mr. Hunter's description of a chancre is correct, and drawn from nature, still I believe few will confine this term, or that of primary venereal sore, to those

ulcers only which answer to his description.¹ As the result of long, attentive, and anxious observation, I should say that primary venereal ulcers present an almost endless variety of character. I would define a primary venereal ulcer to be "one which is remarkably slow in yielding to ordinary, mild, local treatment, but which is curable by mercury, and which, if not so cured, is likely to be followed in two or three months by secondary symptoms, which again also are curable by mercury." If then there be, as I affirm there is, an almost endless variety in chancres, how can we decide on the nature of primary ulcers, so as to pronounce some to be syphilitic, and others to be mere common sores or simple excoriations? I reply, that we are to be guided in our decision by observing, first, that many of these suspicious ulcerations cannot be referred to any class of common ulcers, as they strikingly differ from them; and, secondly, by attending to the course which these take, when not interfered with by any stimulant or caustic application, and when treated only with some mild ointment or cold water. If, under these circumstances, we find that after eight or ten days such ulcers show no disposition to heal—and if, at the same time, there be a total absence of any cause, such as defect in the general health, to account for this obstinate condition of the local disease—we may then pronounce them to be syphilitic. But I repeat, that the local applications must have been of the mildest kind—for almost any primary venereal ulcer may be made to heal by the use of stimulating applications, applied even for so short a time as one or two days.

It often happens that young men affected with primary sores will first treat them, for one or two days, with stimulant washes, and then apply to a surgeon: he directs the mildest applications, and, finding the ulcers to heal under this treatment without any hardness remaining, concludes that they were not venereal; the appearance of secondary symptoms, however, in a few weeks afterwards, proves the error of that opinion. I have known a few such cases, in which the surgeon has felt so confident in this opinion that he has allowed the patient to marry in a short time after the healing of the sores. I need not attempt to describe the state of his feelings when called on to treat the wife for primary venereal sores!! I am therefore anxious to impress this as a very important rule, not to pronounce any ulcer on the genitals as of an innocuous nature, which may have healed under the mildest applications, if at any time, even during the short space of one or two days, it have been treated with stimulant applications.

We shall now consider the proper treatment for a case of true venereal ulcer, the Hunterian chancre. The local treatment should, in my opinion, be confined to the most bland and mild applications,

¹ We sometimes, though rarely, meet with ulcers which possess all the characters of the Hunterian chancre, and yet prove to be not venereal. The only distinction which I can discover between these and the venereal chancre is, that the former are of a very diminutive size, and, although they heal like the Hunterian ulcer, they do not even approach it in point of size.

such as cannot in any manner alter the features of the ulcer; for I am certain that many useful indications, which may serve to guide us in the administration of mercury, are to be derived from observing the changes which these ulcers undergo through the agency of that medicine: these changes, and their corresponding indications, I shall hereafter advert to. I am further confirmed in this opinion, from having observed that little or no benefit is to be derived from a contrary practice; thus, I have known a chancre completely cut out on the first or second day after its appearance, yet the occurrence of secondary symptoms was not prevented; I have also, in numerous instances, known various caustics and stimulating applications employed, but I have not seen that such cases were rendered thereby more manageable, or that the patient was secured from those untoward changes which too frequently occur in the chancre itself, before it is finally healed; nor were such cases less liable to secondary symptoms.

But before we can appreciate the effects of, or draw indications from, the various changes induced in a chancre by mercury, we should first be well acquainted with the wholesome or natural effects of this medicine on such an ulcer. If it be asked how soon may we expect to find the condition of the ulcer in any manner influenced by the mercury? I would say, in ordinary cases, we can observe it from the third to the seventh day. I cannot agree with Mr. Hunter, as to the time in which he says a chancre becomes affected by mercury. Page 333, octavo edition.

“Probably from the before-mentioned circumstances, (the variations produced by certain peculiarities of the constitution at the time,) it is, that a chancre is, in common, longer in healing than most of the local effects from the constitutional disease, or lues venerea; at least longer than those in the first order of parts; and this is found to be the case, notwithstanding that the cure of a chancre may be attempted both constitutionally and locally, while the lues venerea can, in common, only be cured constitutionally. It is commonly some time before a chancre appears to be affected by the medicine. The circulation shall be loaded with mercury for three, four, or more weeks, before a chancre shall begin to separate its discharge from its surface, so as to look red and show the living surface; but, when once it does change, its progress towards healing is more rapid. A lues venerea shall, in many cases, be perfectly cured before chancres have made the least change.”

Now, I think it may be affirmed that, in ordinary, the constitution is brought under the influence of mercury between the third and the seventh or eighth day; and I feel no hesitation in saying, that as soon as this takes place, we shall observe a striking change in the appearance of the ulcer. The first remarkable change is that the chancre appears a little larger, but, at the same time, less deep. This increase in the size of the ulcer is not very considerable, nor is it attended with an increase of surrounding inflammation or swelling. The first demonstration of the influence of mercury on the ulcer will be eagerly looked for by a surgeon who

is acquainted with its effects, and yet it would create uneasiness in the mind of a practitioner who was unacquainted with it. Indeed, I strongly suspect that this first change in the ulcer has, in many instances, deterred the surgeon from its further use, and has impressed him strongly with an opinion, that in such cases the mercury, disagreeing with the ulcer, proved that it was not venereal. And thus the patient was debarred, for the present, from the benefit of this medicine, and was so prejudiced against its use, that he could not be prevailed on to employ it in any subsequent stage of the disease, until convinced, by long and sad experience, of the inefficacy of other modes of treatment. While an experienced surgeon will not be deterred, by this slight change in the ulcer, from persevering in the mercurial treatment, he will also be well aware that a sudden and considerable enlargement of the ulcer, especially if accompanied with an increase of surrounding inflammation and swelling, would denote a very unfavourable change. We next find that the surrounding hardness declines, that granulations begin to arise, that the discharge becomes purulent, and that the entire surface of the ulcer becomes clean and red. In a few days more the ulcer contracts, a thin cuticle forms on its edges, and this daily increases until the ulcer is finally healed. Some degree of hardness, however, remains for four or five days after the healing of the ulcer; but this also disappears, and leaves the part possessed of its natural softness. Such is the progress of this symptom, from the time it comes under the salutary influence of mercury until it is finally cured, in those cases where the mercury agrees well with the patient, and where it has been used with judgment. I shall only add that, in general, it will be prudent to continue the use of mercury, not only until all hardness be removed, but even for a few days longer. I think we may lay it down as a general rule, that the course of mercury, even when it has been well conducted and has agreed well with the patient, should be continued for not less than one month. I know that some cases have been perfectly cured in three weeks; but I have too frequently seen relapses follow such short courses of mercury, when employed for the cure of primary symptoms.

I believe it is scarcely necessary for me to add, that I should wish a moderate ptyalism to be kept up from the time the mercury comes to act on the system until it be finally discontinued. The doses in which the mercury should be administered, and the circumstances which require it to be from time to time discontinued and again resumed, must be left to the judgment of the practitioner, and will of course vary in different cases.

From some expressions in Mr. Hunter's work, I have known some young men led to suppose, that, when a chancre had lost its venereal characters, and had got into the state of a granulating ulcer, it was devoid of all venereal virus, and therefore incapable of conveying infection. In the early part of my professional life, I have known more instances than one which proved the fallacy of this notion. I had once an opportunity of learning that a

chancre, even when recently healed, was still capable of communicating the venereal disease, if the cuticle chanced to be rubbed off. A young man, whom I was treating for a chancre, had the imprudence to marry privately in a day or two after his chancre had healed; the cuticle was rubbed off, and I was called upon, in a fortnight after, to treat his wife for a chancre and bubo.

The progress of an Hunterian chancre towards healing often deviates from the description just now given. I shall here notice a few of those interruptions which deserve attention, as they show a necessity for some alteration either in the local or constitutional treatment; and I may here add, that the other forms of primary venereal ulcers are liable to the same interruptions.

First. The ulcer, though its surface may be clean and florid, may yet show no disposition to cicatrise, but will remain stationary for many days, although the mercury seem to agree well with the system. When we see this indisposition to heal attending the full and healthy action of mercury, we have only to apply a single touch of *argentum nitratum*; this will induce a rapid cicatrization.

Secondly. After the ulcer has spread a little under the influence of mercury, it will sometimes throw up a whitish fungus, and continue to enlarge more than we should expect in a healthy chancre: this condition is most apt to occur in those cases in which the mercury has been late in beginning to act on the system, and in which it does not act very kindly. In such a case, the most judicious treatment is either to suspend the use of mercury for a few days, or at least to allow longer intervals between the different doses; and, at the same time, to give the patient bark joined with small doses of opium, and to apply the wash of calomel and lime-water to the part. This plan will in a few days bring the system more satisfactorily under the influence of mercury, and put the ulcer into a healthy granulating state.

Thirdly. The mercury, in some cases, will most unexpectedly take a sudden and severe hold of the system, inducing profuse ptyalism within the first three or four days, and, as a consequence, the almost instantaneous healing of the chancre; such a healing of the chancre, however, is not a cure of the venereal disease. For we shall find that a bubo will now make its appearance, perhaps at the very time that the chancre has thus suddenly healed; this bubo will proceed with unusual rapidity to suppuration, if we do not at once desist from mercury. I have not tried by experiment whether such bubo absolutely requires a further use of mercury, I can only say that I have always acted on the supposition of its being required, and as soon as the salivation had subsided, I have resumed the use of mercury in such a manner as to affect the mouth again, but more slowly and more gently.

Fourthly. When, during the healing of the first chancre, one or two new ulcers arise, possessing all the obvious characters of chancre, I think that we are not called upon to make any change in our treatment, for I have generally observed that these new ulcers pass through the different processes which lead to the heal-

ing of a chancre, but with greater rapidity than the original chancre had done, so that they are perfectly healed at the time that we should have desisted from mercury, for the cure of the original ulcer, if these secondary chancres had not appeared; I do not recollect having seen one of these accessory ulcers ever undergo an unfavourable change.

Fifthly. After a chancre has been healed, even without the assistance of active topical treatment, the hardness will sometimes continue too long. When this occurs in those chancres which had been seated on a flat surface, we can generally refer the induration which remains to a late or to an unsatisfactory action of mercury: under such circumstances we must therefore be cautious not to lay it aside too soon, and we should at the same time rub the cicatrix twice a day with mercurial or iodine ointment. But when the chancre has occupied the very edge of the prepuce, the hardness, which will then very generally remain, is merely owing to the peculiar loose structure of the part, and the adhesion produced by the inflammation in the interposed cellular substance now preventing the outer from moving on the inner skin. The hardness, in such a case, must be left to the slow operation of time, and its removal may be expedited by repeated frictions of the part. Here I would observe, that the opening of the prepuce sometimes becomes so much contracted by the cicatrix of one or two chancres which had been seated on its edge, as to require the operation of phymosis; the division of the skin in this case should be made in a line with and close to the frænum, by which we shall sufficiently enlarge the prepuce, and leave less deformity or inconvenience than if the division had been made along the dorsum or sides of the penis. Mr. Wilmot long since suggested to me a practice in this operation, which I consider a material improvement, namely, to pass two stitches of interrupted suture in each lip of the wound, so as to keep the cut edges of the skin and mucous membrane on either side in apposition with each other, and thus effect the healing of each lip of the incision by the first intention, leaving the angle to heal by granulation.

When chancres become inflamed and paraphymosis takes place, the usual operation for dividing the stricture should be performed.

Sixthly. Although I have repeatedly stated, that when ptyalism has been established, the further use of mercury becomes comparatively safe, yet it may happen, either from the mercury being continued too long, or too largely, in a weak system, or from a state of fever induced by other causes, that a chancre which has made some progress towards healing, will take an unfavourable turn, and assume a phagedænic or a sloughing disposition. From whatever cause this change may arise, it is plain that the mercury should be instantly laid aside, and every means adopted to remove the febrile condition, while the local treatment must be varied as the state of the ulcer shall require. In cases where, from peculiar irritability or delicacy of the patient's habit, such unfavourable changes might be apprehended, we may guard against such a

change by giving bark and other tonics as soon as the ptyalism is established.

Lastly. The other changes which chancres occasionally undergo are trifling when compared with those which are produced by the supervention of a high degree of inflammation. We occasionally meet with cases in which a chancre has existed for many days, without any remarkable degree of pain or swelling of the parts—yet on a sudden it is attended with a high and dangerous degree of inflammation. This we can generally trace to intemperance, to excessive exercise, or to neglect on the part of the patient. In such cases we find the entire penis becomes much swollen, the integuments are of a bright or purplish red, and there is considerable discharge from the prepuce. These local symptoms will be attended with more or less of fever, the type of which may vary from that of the high inflammatory down to the low asthenic or typhus. If in such a case we press the prepuce all around, we shall detect one spot with an extraordinary thickening and hardness, and here the patient will feel a tenderness beyond even that of all the rest of the prepuce. Should the inflammation continue and increase, we may at length observe a black spot in the prepuce, on its dorsum or one of its sides, the effect of gangrene; this soon opens, the opening from day to day grows larger, until at length the glans appears protruding through it; as soon as this has occurred we shall observe that a considerable remission of pain takes place, the aspect of the ulcerated opening improves, the discharge declines and soon ceases, but the glans continues protruded, and what remains of the prepuce forms such a thickened mass, that to enable the patient to have sexual intercourse, all the projecting skin must be removed by the knife. How should such a case be treated before the gangrene of the skin has begun? I believe the safest line of conduct is to endeavour to subdue the attendant fever; and therefore we must employ the antiphlogistic regimen to such an extent as may be required; nauseating doses of tartar emetic appear of the greatest service in all cases which do not require venesection, or where this evacuation has been previously made. Warm or cold applications may be employed, according as either is found to suit best the feelings of the patient; but on no account should we neglect to make him use the black wash very freely: this can be applied most effectually by means of a syringe with a long pipe, introduced between the glans and prepuce, while the orifice of the latter is closely pressed around the pipe, so as not to allow any of the fluid to escape until the prepuce has been fully distended. This partial gangrene of the prepuce must be looked upon as rather a favourable consequence of this very high inflammation; for in many instances it threatens to destroy the whole of the prepuce, and even to involve the penis itself in a similar fate. Under these circumstances I have repeatedly found that the destructive process was at once arrested by washing the diseased surface with the strong white muriate of antimony, and sometimes with the nitric acid; the former, however, I much prefer. This

application very generally arrests the further progress of the unhealthy action, relieves the patient from pain, so that he can enjoy sleep, and assuages his constitutional fever: however, until this favourable change takes place, we cannot lay aside our fears for the safety of more or less of the penis. In a few cases the process of destruction ceases not until it has destroyed this organ to a level with the pubes; in such melancholy instances, even after the ulcer is healed, the patient is tormented by the manner in which the urine passes out of the distorted and contracted opening of the remnant of the urethra; for it rises so much upwards that the unhappy patient is obliged to direct the stream forward by holding his hand above the pubes.

About twenty years ago, when I had charge of a large number of soldiers labouring under the venereal disease, who were received into the attic wards of Stevens's Hospital, I attempted the treatment of such cases by throwing in mercury largely and suddenly; but whether it was owing to the want of a judicious plan of using mercury, or to the bad habits of the men, induced by intemperance and dissipation, I know not; but I freely admit that with many this practice was not successful. However, the success of the two plans, that by mercury and that by the antiphlogistic regimen, was so evenly balanced at the time the military hospital was broken up, that I was quite undecided which to prefer. About this time I learned the use of the black wash, which has rendered such essential service in the early periods of this condition, that I have not since repeated the experiment of administering mercury through the constitution. Many of the cases treated with mercury were cured without the slightest destruction of any part, but this was purchased by the certain and severe sufferings of a violent salivation. Some escaped with the loss of part of the glans, and some few had the penis destroyed down to a level with the pubes. Possibly the mercurial treatment would have been more frequently successful, had I more constantly used venesection and other evacuations as a process preparatory to the use of mercury. There is one condition of the sloughing penis which I look upon with total despair of being able to afford any means of arresting its progress until it has destroyed the entire penis down to the pubes: I mean that condition in which the sloughing part is so soft as to resemble melted tallow when beginning to form into a solid. I have never yet seen the progress of this arrested, even for a moment, by any local or constitutional means hitherto employed.

When, in addition to the inflamed and painful condition we have just now alluded to, we find hemorrhage to supervene, we must carefully watch the effects of the evacuation. In some fortunate cases the patient informs us that the pain is much mitigated since the bleeding; here we may hope for a favourable issue; the inflammatory swelling of the prepuce will begin to decline, as also the pain and fever. Possibly another hemorrhage may take place in three or four days subsequently, which will be followed by a still more marked decrease of inflammation and fever. But in other

less fortunate instances, the first hemorrhage is not followed by any mitigation of inflammation or fever, and a succession of bleedings may take place at intervals of twelve, twenty-four, or thirty-six hours. The type of the fever then becomes changed; it is no longer of the inflammatory, but merges towards the typhoid form, in all its characters strongly representing what some have called an irritative fever. The patient gets no sleep, he looks pale and haggard, is rapidly emaciating, complains of the unceasing and severe pain of the diseased parts, and is in constant dread of a fresh hemorrhage; the discharge becomes more copious, and extremely fetid, and so acrimonious as to excoriate the neighbouring parts over which it runs. In order to afford effectual relief in this miserable state, we must slit up the prepuce, taking care to carry our incision so as to run near to the chancre, and having thus exposed the sloughy surface we must apply to the bleeding point a dossil of lint soaked in spirits of turpentine, and then apply moderate compression. The turpentine seems to serve such cases not only by arresting the bleeding, but also by exciting in the ulcerated surface a more healthy action, which soon induces the parts to heal. We should be careful not to have the dossils of lint so wet as to allow the turpentine to trickle along the adjoining parts, as this will be found to scald them very much, and thus add unnecessarily and severely to the inflammation of the penis, and to the sufferings of the patient. I have seldom seen the ligature succeed in preventing a return of the hemorrhage, as the coats of the arteries appear to slough again almost immediately under the ligature.

In some cases of sloughing of the prepuce, the process spontaneously stops, after having completely removed the entire prepuce, leaving the patient as if he had undergone the operation of circumcision. By some practitioners we are recommended to consider this as a perfect and permanent cure of the disease, and not requiring the further use of mercury. I have certainly known some cases which would tend to confirm this opinion, especially when the sloughing began at the early period of the chancre; but in other instances secondary symptoms have supervened; and therefore I should consider it prudent to subject to a course of mercury all those in whom the sloughing had taken place at a late period.

Having offered these few remarks on the accidents to which primary venereal ulcers are subject, I shall make some observations on *chancreous excoriation*.

This excoriation does not at first present any distinctive or specific characters; after ten or twelve days, however, it presents new features; sometimes a great part of the excoriated surface heals, and leaves one or two spots unhealed—these are usually of a circular form, and rest on a hardened base, although up to this period no induration had been perceptible. Another striking feature, often met with in chancreous excoriation, is, that while it generally presents a red surface, it looks as if it were dry, or is like an excoriation which has been for some time exposed to the air, and this even although it be dressed with lint soaked in water.

As a proof that such excoriations are primary venereal ulcers, we shall find that their morbid characters will begin to improve as soon as the system feels the salutary action of mercury; and that they will heal, and the hardness be dispersed, in the same time and manner as the true Hunterian chancre. We shall also find that if mercury be used in an injudicious or ineffectual manner, these excoriations will, like ordinary chancres, undergo various unfavourable changes, and will be followed by the usual secondary venereal symptoms.

A few instances will suffice to show the changes which excoriations may undergo before they assume the venereal characters; and to show that this form of primary venereal symptom requires an attentive and lengthened course of observation, before we venture to decide on its nature.

July 31st. Mr. W—, six days since, immediately after connection, perceived two excoriations, to which he applied dry lint: one of them has healed; the other shows no disposition to heal. This latter is situated on the inside of the prepuce, at the root of the frænum, and is equal in circumference to that of the flat surface of a split pea; is very superficial, with a smooth surface, and edges not at all raised; it appears to yield very little discharge, and is seated on a very hard base, the hardness extending a little beyond the limits of the excoriation. Sumat pil. hyd. gr. v. mane nocteque.

Aug. 3d. The excoriated spot presents more the characters of a secondary than of a primary ulcer; it is enlarged, and now has a white centre, surrounded with an orange-coloured, or reddish circle; the hardness is unaltered. Sumat pil. hyd. gr. v. ter in die.

Aug. 6th. Inner gums of lower incisors are slightly affected: ulcer yields a purulent discharge, in sufficient quantity; the white part in the centre is much reduced in extent, as if the orange circle had encroached on it; hardness not at all reduced; an incipient bubo in right groin, which is slightly painful when he sits down or gets up, but not when he is walking. Pergat.

Aug. 9th. Mercurial action more discernible; ulcer has its central part of a less deep colour, and of less intense whiteness; the outer edge of the orange border has healed; orange colour is less deep; the hardness of the base is also less. Pergat.

Aug. 12th. Ulcer is all healed, except a line in the centre, which is quite red and healthy; the groin is easy; mouth as on 9th instant. Pergat.

Aug. 16th. Ulcer perfectly healed, glands of groin free from all pain, mouth not more affected. Sumat pil. hyd. gr. x. ter in die.

Aug. 20th. Mouth not more affected. R. Calomelanos 3 ss. ext. opii gr. v. ft. pil. x. Sumat i. ter in die.

Aug. 22d. Sumat pil. unam omni mane. Ungt. hyd. fort. 3 ss. omni nocte.

Sept. 14th. During last three days, mouth has been a good deal affected.

Sept. 17th. Mouth rather less affected. Sumit pil. i. bis in die. Rept. ungt. hydr. o. n.

Sept. 21st. Mouth a little more affected.

Sept. 24th. Omitt. Med.

Mr. B. applied to me ten days ago, on account of a small circular excoriation on the inner surface of the prepuce; this was so purely an excoriation, of such a healthy red colour, so free from hardness, and from every venereal or suspicious appearance, that I did not at that time look on it as venereal, and accordingly advised him to apply only lint and cold water. In the course of six days the appearances began to change; and on the tenth day I observed that the centre of the excoriation had assumed a dirty yellow colour, while a pretty wide margin retained its healthy red appearance: on the thirteenth day the surface was as on the tenth, but the entire ulcer now rested on a base of considerable hardness; judging this to be venereal, I then put Mr. B. on the use of pil. hydr.; this did not agree very well with him, and the ulcer did not proceed on kindly towards healing: on the contrary, at one period its central part assumed a blackish tinge, and showed a disposition to slough, whilst the margin remained of a pretty healthy red colour.

At the expiration of six weeks (the ulcer not being yet healed) he was affected with venereal eruption, and sore throat. These symptoms yielded, and the ulcer healed, under a rather protracted course of pil. hydr. gr. iii. and sulph. quininæ gr. ii.; the doses of which did not at any time exceed three in the day.

Towards the conclusion of this course, being anxious to finish the treatment by a more decided action of mercury on the system, I added to the above, ungt. hydr. fort. ʒ ss. omni nocte, for eight nights. But this proved to be too much for his system, as was evinced by an attack of mercurial excoriation about the anus; on the appearance of this, of course, the mercury was laid aside; and, since that period, Mr. B. has not had any return of venereal symptoms.

Feb. 17th. Mr. P. had been exposed to the danger of infection fourteen days ago; three days after which he applied to me with a pretty large excoriation of the prepuce behind the glans; this was attended with scarcely any hardness, and it healed in the course of eleven days, under the application of spermaceti ointment. At present the surface, though healed, looks unhealthy, and this spot resembles a venereal tubercle; there is considerable hardness, fully as great as that which attends the true Hunterian chancre: pil. hydr. gr. v. mane et nocte.

Feb. 20th. Surface is again ulcerated, or rather excoriated, with a purulent discharge, and considerable hardness of base. Sumat pil. hydr. gr. x. omni nocte, et. gr. v. omni mane.

Feb. 26th. Sumat pil. hydr. gr. x. nocte manequē.

March 3d. Yesterday had an attack of mercurial dysentery; mouth is now sufficiently sore; for the two or three last days has taken only three pills a day; ulcer is much smaller, and almost free from hardness. He himself remarks that it differs from every other chancre he has had, or has seen, in its never having gone deep.

March 9th. Mouth still sore; ulcer is perfectly healed, not leaving the slightest degree of hardness. N. B. He left town the following day, with directions to keep his mouth slightly sore for a fortnight longer. He has since enjoyed good health, and has had no appearance of secondary venereal symptoms.

A chancre on the skin of the penis, or external surface of prepuce, is quickly covered with a scab. Perhaps the best mode of treatment (at least the most comfortable to the patient) is to let the scab remain, and whenever it is accidentally rubbed off, to expose the part to the air, and cause a fresh scab to form. The drying in of the scab, its gradual contraction, and its less intimate adhesion to the surface of the ulcer, will point out the gradual improvement in the concealed ulcer, and enable us to judge of the favourable action of the mercury; while the contrary changes in the scab will indicate that the mercury is not acting in a salutary manner.

I deem it right here to notice an appearance in chancres healed by local means only, which we occasionally meet with in cases where mercury had been injudiciously employed—an appearance which I have never, except in one instance, seen. The appearance I allude to is a remarkably hard lump, as large as a filbert, situated on the prepuce in the site of the original chancre; the skin which covers it is of a peculiar purple colour. In one instance, that of a young gentleman, whose chancre had been healed for three or four weeks, this appearance was attended with most alarming symptoms, viz. extreme emaciation, thirst, loss of appetite, and profuse night sweats. The suddenness with which he had been reduced to this state, from a tolerably full habit of body, and from apparently excellent health, excited in my mind great apprehensions for his safety, especially as some of his family had died of hæmoptysis succeeded by phthisis. I never saw any case in which the venereal virus acted in a manner so like to what we might fancy should be the effect of a slow poison on the system. Yet by means of a mercurial course gradually raised from very small doses, and continued for a longer period than usual, the hardness and discoloration were removed, and he was soon restored to good health, which he still enjoys. This case occurred many years since; at the time when the non-mercurial treatment was first introduced into Dublin. In all the other instances of this large purple tumour, where it has formed after the healing of a chancre by local means only, I have seen secondary symptoms follow in the same time, and pursue much the same course, as when these have succeeded to chancres which have been only imperfectly cured by the injudicious administration of mercury.

I shall next consider some of the peculiarities of chancres,

depending on the peculiar structure of the part in which they are situated. It is scarcely necessary to say, that the quantity of hardness is much less in chancres situated on the glans than in those on the prepuce; but still a degree of hardness sufficient to guide us in the treatment attends even the former.

There is a form of venereal chancre on the edge of the prepuce, of which I do not recollect ever to have read any description. The account we receive from the patient is, that he thinks he tore himself in the act of connection; we see that the lacerated part shows no disposition to heal, but is not painful or swollen, and appears in the form of a fissure. When the prepuce is partly retracted, this fissure appears as if it had been divided by a long incision; the edges are hard and deep, not swollen or inflamed, and yielding scarcely any discharge; it is not at all painful, unless when an attempt be made to retract the prepuce. This is certainly a primary venereal ulcer; its peculiar characters may probably depend on the infection being ingrafted on the torn surface; it requires the use of mercury to the same extent as does the circular Hunterian chancre; nor does it need any peculiar local treatment. I cannot recollect any instance in which this form of ulcer took an unfavourable turn, although I have known some patients who did not apply for assistance for three weeks after connection, being lulled into a feeling of security by observing that this ulcer was unattended with swelling, inflammation, pain, or hardness.

We sometimes see the edge of the prepuce beset with five or six circular ulcers; these, if left to themselves, will first granulate, then become fungous, and finally will heal spontaneously. The form, as well as the slow and indolent character, of these ulcers, might dispose us to conceive that they were syphilitic; the appearance, however, of several of these at once, along the margin of the prepuce, and their being destitute of any hardness, will serve as a criterion whereby we may make the distinction. These ulcers may always be cured by suitable local treatment alone; I have never seen them take an unfavourable turn. Sometimes there may also be present, in conjunction with these, others of a true venereal character, and for which mercury must be administered; we shall then have an opportunity of remarking that this medicine exerts no influence on the ulcers at the extremity of the prepuce. Sometimes this circle of ulcers is accompanied by a single one of the same character far within the prepuce.

When a chancre is seated close to either side of the frænum, we find it invariably happens that the ulceration passes through this process of integument, at first making an opening through it, and in a few instances the ulcer has healed, leaving this hole; but in the majority of cases the ulceration goes on until it has divided the frænum entirely, then each side of the ulcer heals separately, the part on the glans showing a tendency to advance slowly, making a superficial groove in the anterior part of the glans. The only direction to attend to in the management of these chancres, is to cut through the frænum as soon as the ulcer has

once perforated it; for we shall generally find, when this has not been submitted to, that the sore will not assume the granulating state until the ulceration has completely divided the frænum. The posterior part of the ulcer, having generally the larger part of the frænum, will require repeated touches of caustic to prevent it from healing with a large knob; while the anterior part will be benefited by the black wash, or some other gentle stimulant. Sometimes the frænum (having been divided by the surgeon or by ulceration) presents a furrow, showing that the part is composed of two layers of cuticle; this may be a little more tedious in healing.

A chancre sometimes, though rarely, is seated at the very orifice of the urethra; in this situation it is always slow in going through the different stages preparatory to healing, and it too often assumes an eating disposition, passing all around the orifice; there is one very serious ill consequence which always results from this—namely, that in some time, perhaps in one or two years, the patient will suffer severely from symptoms of stricture. In treating such a case, we should use every effort to prevent the extension of the ulceration to the entire circle of the orifice, for unless it entirely encircle the orifice, contraction will not follow; this can with certainty be accomplished by touching the ulcer as soon as it begins to extend, with the colourless muriate of antimony, or with nitric acid: these applications are no doubt severe, but the evil they avert is one of great magnitude; for I will venture to assert, that of all forms of stricture, this is one most apt to recur; indeed, it does not in any instance admit of a cure by the ordinary treatment of strictures.

I am happy to say that I have lately discovered a mode of treating this stricture which has proved eminently successful in the few cases in which I adopted it. This plan of treatment consists in this simple operation—Having detached the skin from the end of the urethra, to which it is generally intimately adherent, I divide the urethra below, to the length of more than half an inch. I raise the mucous membrane from each lip of the incision, then cut away a portion of the bared corpus spongiosum, to such an extent as will allow the raised mucous membrane to cover the cut edge. I stitch down this membrane upon the corpus spongiosum; and thus having covered each lip of the wound by mucous membrane, I have effectually guarded against the possibility of reunion of the lips of the wound, or subsequent contraction of the opening. The opening of the urethra thus produced, is of course of a size larger than natural.

Of late years, notwithstanding what Mr. Hunter asserts to the contrary, I am confident that I have seen cases of chancre seated altogether within the urethra; such cases have been frequently mistaken for mild gonorrhœa, and have, for weeks together, been treated as such: in some of these cases, the surgeon has not been apprised of his mistake until the ulceration has actually laid open the fore part of the urethra, or has extended forwards to its orifice, so as to become visible. A very little attention will enable us to

discover the real nature of this case, even in its earliest stages ; for we can externally feel a hardness in that spot of the urethra where the chancre is seated, and the symptoms of gonorrhœa are so slight, that this alone should excite our suspicion, and induce us to search for a chancre in the urethra.

I shall not attempt any farther description of the various primary venereal ulcers which are daily to be met with ; much less shall I undertake any classification of their endless varieties, or of the course which each peculiar form has been supposed to run. They will be found to differ so constantly, that very rarely shall we find any two of them to correspond accurately with each other ; not merely at their commencement do they present such dissimilar characters, but in their different stages towards healing they will be also found to deviate most strangely from each other, more particularly so when they have been treated by mercury. One remark, however, as to their treatment, deserves notice ; viz., that patients affected with these irregular ulcers have been found, in general, very difficult to salivate. This cannot be ascribed to the medicine having been used too sparingly ; for in the reported cases we find the doses were rather too full than the reverse ; some have said that it was owing to a degree of febrile excitement in the system, which the irritable state of the ulcer had induced and maintained. But this remark can truly apply only to a few of these cases ; for the majority of them will be found to possess rather an indolent character. The explanation which I would offer on this subject is, that the general health of such patients has not been in a good condition at the time these ulcers have made their appearance, and on that account mercury was more likely to disagree, and to exert its poisonous than its salutary operation on their system, especially if used in full doses. Inattention, then, to the existing derangements of the system, ignorance of the means to remedy these, and probably, in most instances, the exhibition of mercury in too high doses, have all conspired to bring into discredit the plan of treating such ulcers by mercury.

There are some, I know, who assert that mercury is an unfit remedy, "because it disagrees with the ulcers ;" but such persons altogether overlook its influence on the system, and imagine that mercury disagrees with such ulcers, only because the latter have been derived from a peculiar kind of virus, to which they suppose mercury is inimical. That it is not with the ulcers, however, but with the constitution that mercury disagrees, we may learn from this fact ; that when treating a patient affected with any other irregular and obstinate ulcers, and who may chance to be regularly salivated by the mercury, the ulcer is not found to be injured by this medicine ; moreover, such an opinion is against all experience of the effects of mercury upon almost every other description of ulcer. For my own part, I cannot recollect an instance where mercury, when it produced a healthy ptyalism for the cure of other diseases, had disagreed with a fresh wound, or with an ulcer of any ordinary class ; on the contrary, I am sure that every

surgeon has at times been agreeably surprised, on finding that a salivation, excited for the cure of some acute or chronic disease, had at the same time, most unexpectedly, caused an obstinate ulcer to heal: this fact has been so often forced on my observation, that I have, in some instances of very obstinate ulcers, subjected the patients to a course of mercury, solely for the purpose of healing these ulcers. I shall adduce some instances of the success of this practice, when treating of diseases not venereal, which are curable by mercury.

CHAPTER V.

On Bubo.

To Mr. Hunter is the profession indebted for correct notions respecting the nature of bubo, which he has properly classed among the primary symptoms of the venereal disease. It is not a little surprising that the most extensive opportunities have not as yet furnished practitioners with a single instance in which this symptom can be traced to a secondary venereal ulcer; and yet buboes cannot always be attributed to an inflammatory condition of the chancre, as they more generally arise when the inflammation in the latter has subsided, or when it does not exceed that which usually attends the secondary venereal ulcer; hence it would appear, in the latter case, as if the venereal virus had undergone some change which tends to assimilate it to the human solids and fluids.

The period at which bubo occurs, after the appearance of chancre, is not confined to any definite time, nor is it a necessary attendant on all chancres, many chancres being cured which had never, at any time, been followed by bubo; nay, it sometimes happens that chancres are cured without the use of mercury, and secondary symptoms supervene, and yet the passage of the venereal virus into the system had not been delayed or announced by the formation of bubo, or by any tendency to it. The venereal virus, therefore, can pass unaltered into the system, although in this course it must have passed through one or more lymphatic glands.

When chancre and incipient bubo coexist, it is admitted that the treatment by mercury should be precisely the same as if the chancre alone were present; and accordingly we find, that as the latter improves, so the swelling and tenderness in the former subside; even should the bubo, in consequence of neglect, have acquired great size, and have advanced so far toward suppuration that the integuments shall have become red, still the treatment should be the same as for the chancre alone. When the ptyalism is commencing, the inflammatory condition of the bubo will, for a day, appear rather aggravated; but when the ptyalism is established, then the

inflammation obviously begins to subside. Some advise the use of mercury to be postponed until the gland has suppurated, and the inflammation has been reduced by letting out the matter; I do not think this delay is necessary, though I admit we should first adopt antiphlogistic means to subdue or mitigate the febrile symptoms which have been excited by the inflamed condition of the bubo; this being accomplished, there is no reason why we should longer defer the use of mercury. But should we meet a case, in which, while the chancre is improving (ptyalism being established), the bubo becomes larger, and is attended with an increase of inflammatory redness, and a painful sensation like that of scalding, we are then to infer that the mercury is disagreeing; we should, under such circumstances, discontinue it for a few days, direct brisk purgatives, and the most strict quietness, also the horizontal posture. The amendment in the bubo will assure us that such a line of practice was most judicious, and we may then resume the mercury as soon as we observe its effects on the system beginning to decline, using it, perhaps, in less powerful doses.

It happens in some few individuals that mercury, when rubbed upon the thigh, for the cure of chancre, will excite a slight swelling of the inguinal glands. In such cases, it is prudent to desist from the use of mercury, on that side, for a few days; during this time, the swelling will subside, and, on resuming the mercury, there will be no return of this inconvenience.

When we come to speak of secondary symptoms, we shall find that the cervical glands sometimes swell on the approach of ptyalism; but this swelling will also subside on discontinuing the mercury, and on allowing the salivary system a few days to unload itself. Thus it appears that mercury may cause a swelling even of those lymphatic glands which are remote from the route the mercury takes to reach the circulating system; or it may be that the lymphatic cervical glands are only sympathetically affected, in consequence of the excited state of the salivary organs.

If mercury, administered for the cure of a chancre, should chance suddenly to produce profuse ptyalism, we shall find the chancre will heal almost instantaneously, while at the same time a bubo will begin to show itself. The state of the mouth in such instances prevents us from falling into the error of giving more mercury. Purgings, and such other evacuations as may be employed with the view of reducing the ptyalism, will also tend to produce a resolution of the inflamed gland.

Should we meet with a case in which no traces of a bubo are discoverable, at the commencement of the mercurial course, but in which it may arise after the mercury has fairly affected the system, in such a case, also, we should for a time discontinue the use of mercury.

In all the above cases we should, in addition to purgatives, endeavour to restore the system to a healthy state, by giving bark or opium, or such other medicines as we may judge necessary. Sometimes carriage exercise will be found highly advantageous.

If, notwithstanding our endeavours to the contrary, the bubo shall have suppurated, are we to allow it to open spontaneously, or when, and how ought we to open it? The opening of the bubo should be delayed until the tumour has pointed, and the skin has become very thin; an earlier opening will induce an increase of pain and fresh inflammation, which will not subside in less than three or four days: by delay, also, there is a chance that the matter may be absorbed, and the patient be thus saved from all the annoyance attendant on an ulcer in the groin.

In most cases, I advise the opening to be made in the thinnest part of the integuments, and only large enough to admit of the easy escape of the matter.

There is one particular form of bubo, in which a very different rule for opening it must be adopted; I allude to that which has acquired a large size, in which the tumour does not point or become conical, but assumes a flat surface, the whole of the integument becoming very thin and discoloured; in such a case, we should cut through the entire length of this thin covering of the abscess. Were we only to make a small opening, we should find that the discharge would continue very long, that it would be thin and of bad quality, and that at the end of five or six weeks there would be no prospect of healing; for the integuments will have lost so much of their vitality, that they will either be removed by ulcerative absorption, or will have curled and turned in, and then the surgeon will be compelled to apply the caustic, or the knife, for their removal. Formerly, surgeons were in the custom of using a large curved scissors to cut away all this loose skin, and thus leave a very large ulcerated surface: such an operation would be considered, at the present day, not only useless, but injurious and cruel. When a quantity of loose, thickened, and corrugated skin forms the sides of a deep ulcer, we should rub these flaps, or their edges, with the kali purum; thus a portion of this superfluous skin will be removed, and a vigorous healing action will be excited in the remainder, and the healing will be much promoted by pressure applied over the entire ulcer.

Should a bubo become phagedænic, and threaten to open the femoral artery, or should it give rise to constitutional fever and irritation, its further progress can often be almost instantaneously arrested, by brushing over the edges with the strong muriate of antimony; and however large the surface, it will begin to heal, even if the edges alone have been touched. The pain from this application must be severe, but it does not last, in general, more than from half an hour to an hour; and the patient then often finds great relief, and falls into a sound refreshing sleep of some hours' duration; although, perhaps, for many nights previously, he had been unable to procure rest, even with the assistance of large doses of opium.

After a bubo has opened spontaneously, we sometimes find that one of the lymphatic glands rises up from it, and protrudes beyond the surface of the surrounding skin, the loose edges of which over-

hang its base. This, though formidable in appearance, is not very painful; it gradually subsides, and becomes covered by skin in the process of cicatrisation, like the rest of the ulcer, and yields as certainly, though not as quickly, as the other primary symptoms, when once pyalism is fairly established. Some have advised the destruction of the protruded gland by caustics, and other means; but I have never seen a case in which any such severe measures were necessary.

We sometimes meet with the following condition of a bubo:—a large, indurated, indolent mass, the integuments but little or not at all discoloured, with sometimes a slight tendency to inflammation and suppuration, and yet the patient has used mercury so as to affect his system; in such a case, I think blisters will be found most efficacious; they should be applied repeatedly, but not retained longer on the part than five or six hours. Some advise us, if we feel a softened spot in the centre, or in any part of this tumour, to apply the kali purum, with the hope not only of letting out the matter, but also of exciting a healthy inflammation in the part; this practice, however, entails the additional inconvenience of an open ulcer, without accelerating the dispersion of the bubo as efficaciously as blisters do. Many cases of this sort are ascribable to an injudicious use of mercury, and therefore we must at the same time apply ourselves to restore the system to a more healthy state.

A bubo not unfrequently leads to another tedious local affection, that is, a sinus commencing at the pubic corner of the ulcer, and descending in the angle between the scrotum and the thigh; we observe the skin in this situation to be red and raised; by pressing on this we force out a little matter into the ulcer; from day to day we can see this sinus increasing in length. This disease teazes the patient for a long time, as it continues even after the accompanying chancre has healed, under the influence of mercury. Pressure has no influence in arresting the progress or in effecting the cure of this sinus. The treatment to be pursued in this case is either to leave it to the restorative powers of the system, or if these prove inefficient, we may divide it its entire length, or make a small opening into it inferiorly, and daily inject some stimulant fluid.

Another, and a still more troublesome consequence of bubo, is a superficial spreading of the ulceration along the inside of the thigh, in some cases even to the anus, in others it extends upwards on the abdomen, and in some it occupies both situations; one edge of this ulcer is deeply and slowly increasing or eating away, while the opposite is thin and may be healing: this is what has been described as the horse-shoe ulcer; it is often very sensitive. Mercury, in general, does not serve this symptom; it sometimes even seems to excite its rapid extension. Lotions of different kinds, especially the black wash, appear to me to agree with it better than any other applications; yet, in some cases, very minute doses of mercury will be found most useful in disposing the ulcer to heal.

Let the following serve as a striking, but not an unparalleled, instance of the extent to which this kind of ulcer sometimes spreads, of the great length of time during which it may continue, and of the difficulty with which it is at length brought to heal.

October 13th, 1826. Mr. H—, aged thirty years, contracted a chancre on the frænum three years since. *Argentum nitratum* was rubbed on the ulcer, and he used mercurial ointment under the care of a physician who made him repeatedly suspend the use of mercury the moment his mouth became ever so slightly affected. Before he had ceased the course of frictions, a bubo appeared in his groin—this was punctured with a lancet. In five months after the appearance of the chancre, he consulted an eminent surgeon in Cork, who prescribed some form of mercurial pills, which slightly salivated him; he used only twelve of these. This surgeon then told him he should not use any more mercury, and advised sarsaparilla, lotions, and ointments of various kinds. Twelve months from the commencement of the disease he again consulted the same surgeon, in consultation with Mr. Evans, the author of the *Treatise on Ulcerations of the Genital Organs*. Repeated venesections and low diet (the results of their deliberations), he states, induced great weakness, and nearly brought him to death's door.

When recovered from the debilitating effects of this plan, he repaired to London, where he remained for one month, under the care of the late Mr. Abernethy. Blue pill every second night, and a sort of blue wash, constituted the plan of treatment.

He next applied to another very eminent surgeon in London, who tried blue pill for a short time, but laid it aside because he thought it caused erysipelatous inflammation, and he cautioned him *never again* to use mercury. Under this gentleman's care he remained for two months, trying a great variety of external applications, never employing the same beyond four or five days. He also used a variety of internal remedies, among which were acids, bark, and arsenic.

He next applied to the late Mr. John Pearson, and during six weeks that he remained under his care, he took sarsaparilla syrup, and used a variety of local applications, of which he can only name carrot poultice.

In the summer of that year, he drank the Harrogate waters for one month, having been told that the sores were prevented from healing by a scorbutic state of his blood. He derived no benefit from these waters.

During the last year, he had gone through long courses of sarsaparilla, and repeatedly.

At present he has an ulcer, the size of a shilling, on the left outer ankle—this does not possess the character of a secondary venereal ulcer. In the left groin is a cicatrix, which beginning about the anterior spine of the ilium, is continued down the groin and passes to the back of the thigh, where it joins a prodigiously extensive ulcer; this ulcer reaches from the anus down along one third of the back of the thigh; below the fold of the buttock it covers the

entire breadth of the posterior part of the thigh. Above the fold of the buttock it is less wide, being in one place as narrow as one inch and a half. It is surrounded by a very deep edging of skin, which is cut very irregularly into knobs. The surface of this extensive ulcer is every where devoid of granulations, and presents three spots of deeper ulceration, in parts remote from each other. The entire of this ulcer is exquisitely sensitive and sore. Another branch of the cicatrix extends along the front of the thigh, and having traversed the upper third of the limb, it there ends in an irregular deep ulcer, the size of half a crown. The skin of the forehead, near the roots of the hair, is a deep red or copper colour, and the scalp is in a very scruffy condition. The general health is apparently very good. For three years he has been prevented by this disease from attending to any business.

October 13th, 1826. Ordered ung. hydr. fort., gr. x. omni nocte femoribus infricanda. R. aq. calcis, ℥ viij. hydr. oxym. gr. ij. M., ft. lotio ulceribus applicanda.

23d. Repet. ung. et lotio.—ung. hydr. nitr. ℥ i. ung. zinci. ℥ i. ft. ung. quo curentur ulcera omni nocte.

28th. No sensible effect on the mouth, bowels costive, ung. hydr. fort. ℥ i. o. n. Lotio acet. cupri ulceribus; pill. purg. pro re nata.

November 5th. Mouth slightly affected, which induced him to omit the mercurial ointment the three last nights. Anterior ulcer of the thigh had been covered with hydr. præc. rub. which has acted too severely, having carried off every thing like granulation.

7th. ℥ i. ung. hyd. fort. alt. noct.—R. ung. c. lapid. calam. ℥ i. ung. ærug. æris ℥ ij. fiant ung.—quo curentur ulcera omni nocte.

13th. Ulcers are all healing, but without throwing up granulations. In the ulcer in front, as also in that behind, some new ground has been broken up. Ung. hyd. fort. ℥ i. alt. nocte.

16th. Mouth not affected, ulcers improving. Ung. hyd. ℥ i. omni nocte.

22d. Mouth slightly affected, ulcers are all improved; that on the outer ankle is not larger than the surface of a split pea, that on the front of the thigh is not as large as a sixpenny piece, but not granulating. The ulcer on the back of the thigh has the greater part of its surface covered with very small granulations, and altogether shows a strong disposition to contract and heal. In one part it is only half an inch across, and in a narrow neck only one quarter broad. There is still too great a thickness of the scales in the scalp. Repetatur ung. ℥ i. o. n. Sumat sulph. quinæ. gr. ij. ter in die.

26th. Mouth not more affected, ulcers are all slowly but steadily improving; the large one is obviously healing, more by contracting its surface than by granulations. Repetatur ung. ℥ i. o. n. et sulph. quinæ.

December 1st. Mouth more affected; the small ulcer on the front of the thigh is nearly healed; since 26th ult., it has healed much more rapidly than I had expected; the large ulcer is also contracting rapidly, its edges are much less raised. Pergat.

7th. He has now rubbed for twenty-four successive nights ung. hyd. fort. $\text{\textcircled{D}}$ i. by which his mouth is affected; but this affection does not increase according to the increased number of rubbings. The two small ulcers have scabbed; the large ulcer is very much reduced in extent, is much less irritable, and its edges are very healthy. Omitt. ung.—repet. sulph. quinæ.

13th. Mouth is more affected since he left off the rubbings. The large ulcer is diminishing rapidly, its edges are much thinner, its surface is more healthy, being red and covered with very minute granulations.

28th. General health is very good; the scab has dropped off the ulcer on the ankle; that on the fore part of the thigh is very small. The large ulcer is healing fast by contraction, and is not skinning from the edges, although the edges are thin, and the entire surface is covered with small firm granulations; no bad spot appears on its surface: the greatest length, which is along the internal edge, is four inches and a quarter, and the greatest breadth, from angle to angle, is three inches. Ung. hyd. fort. $\text{\textcircled{D}}$ ss. o. n.—omitt. sulph. quinæ.

January 14th, 1827. Greatest breadth of the ulcer is two inches and three quarters; greatest length, three inches and a half. The surface of the ulcer is not quite so healthy, it shows more of a yellowish surface. The gums of the lower incisors are slightly affected by the mercury. General health is good. Repet. ung. $\text{\textcircled{D}}$ ss. o. n.—R. ung. ceræ. flavæ. $\text{\textcircled{3}}$ i. hyd. præc. rub. $\text{\textcircled{3}}$ i. fort. ung. omitt. lotio.

10th. The ulcer is not contracting; it has become more irritable, in different spots the granulations have been swept away; no sloughing. Ung. hyd. fort. $\text{\textcircled{D}}$ i. o. n.

19th. Mouth very slightly affected; ulcer is rather more unhealthy than on the 10th instant. Ung. c. lapid. calam. $\text{\textcircled{3}}$ i. ung. ærug. æris $\text{\textcircled{3}}$ ij. fiat. ung. Omitt. ung. hyd. Sumat. sulph. quinæ gr. ij. ter die.

23d. Ulcer much contracted, surface much more healthy, with only one or two spots of a yellow colour; the edges are remarkably diminished in height.

February 1st. The ulcer is three inches in length, and two inches in breadth; its edges are perfectly flat and level with the granulations. The ointment does not smart it; he dresses it twice a day. Repet. sulph. quinæ.

21st. The ulcer is one inch and a quarter in its greatest length; the edges and the surface are perfectly healthy, except in the centre, here it is of a dirty dark green colour, bleeding on the slightest friction. He has laid aside the quinine.

March 2d. Ulcer has now assumed a circular form, and is less than half an inch in diameter; the edges are not at all raised; the granulations are very healthy. It will be healed perfectly in six or eight days. He returns to the country to-morrow.

Although a period of four months and a half might, at first sight, appear very long for the healing of an ulcer, yet when all the cir-

cumstances of the case are considered, a different conclusion will probably be drawn. When we take into account the very great extent of ulcerated surface, and the increased difficulty of healing any sort of very large ulcer; when we recollect the very obstinate nature of this, which had proved so intractable in the hands of so many eminent surgeons, some of whom had devoted themselves very much to the treatment of the venereal disease and its sequelæ; and also when we consider the great variety of local and constitutional remedies which had been so ineffectually employed, it must be admitted that this was an ulcer difficult to heal. It is pretty plain, also, that sarsaparilla had not the power of inducing it to do so, for, in addition to the use of it under the late Mr. John Pearson's care, the patient himself had employed it repeatedly during one year. Without presuming to say that this ulcer could not have been healed without the use of mercury, this much is pretty clear, that it had resisted a vast variety of other modes of treatment. When I undertook to employ mercury in this case, I proposed to myself to treat it as I would one of those cases of secondary venereal ulcers which require a very sparing use of mercury, and of which I shall speak when treating of secondary venereal symptoms.

In Mr. H.'s case, the system resisted the action of mercury very strongly, as his mouth was not in any degree affected until the 5th of November, and did not any time exhibit symptoms of ptyalism. Yet as soon as the system acknowledged the action of mercury, then have we the first account of improvement in the ulcers. On December 7th, the mercury was omitted, because I feared to persevere longer in its use, seeing that the soreness of the mouth did not increase with the increased rubbings, and fearing that this mineral would soon begin to act as a poison. The mercury was resumed on the 28th of December, but it now appeared to disagree, for on January 10th, in different spots, the granulations had been carried off. On 19th January, the ulcer receiving a still more unfavourable aspect, the mercury was relinquished, and in a few days the ulcer put on a favourable appearance, and proceeded slowly, yet without interruption, to a final healing.

I am fully convinced that had the mercury been employed in the ordinary manner of beginning with 3ss. or ʒi., and afterwards increased, it would have had a deleterious effect on the ulcer, and have caused it to spread and to slough. So mainly is the benefit of mercury dependent on our apportioning the doses to the state of the system, and to the peculiar condition of the existing symptoms.

Now, although this ulcer had not the characters of secondary venereal ulcer, and although it was not attended with any other venereal symptom, if we except the suspicious state of the forehead, yet I am disposed to think that it had been kept for two years from healing by some infusion of the venereal poison; this, however slight, the constitution was not able to subdue or expel, even though assisted by various reputed anti-venereal medicines, until mercury was tried, and persevered in in the manner I have detailed.

I beg it may not be inferred that I would recommend the use of mercury in all cases of this horse-shoe ulcer, the consequence of ulcerated bubo; or that I conceive that such ulcers cannot be cured without the use of mercury. On the contrary, I have often seen them yield, though slowly, to other treatment, and I have even known some to have been made worse by the use of mercury. But surely, when other means have been tried fully, and without good effect, we should not refuse our patient the chance of being benefited by mercury, especially as we can protect him against any of its mischievous effects by using it in very small doses, and by carefully watching its influence on the system and on the ulcer. In the case I have just stated, I preferred the ointment to any internal preparation of mercury, as I was certain that this would agree with his system fully as well as any other form of the medicine, and especially as the last internal preparation which he used seemed to have disagreed with him so much as to have made his surgeon caution him against ever using mercury again.

The history of the bubo would be incomplete were we not to mention that this symptom occasionally but rarely precedes, by a few days, the appearance of chancre: such cases require great caution on the part of the surgeon; he should be slow to pronounce them venereal, and he should not commence a mercurial course until the chancre has appeared; this delay cannot be productive of any bad consequence, but, on the contrary, will encourage both patient and surgeon to enter on the mercurial course with greater confidence as to its propriety.

There is a chronic form of bubo, which sometimes appears in connection with secondary venereal symptoms, the consideration of which we shall reserve until we come to speak of the secondary symptoms of syphilis.

The lymphatic vessels of the penis are sometimes affected not only with inflammation along their course, but in a few cases this inflammation will in some one part of the vessel go on to circumscribed suppuration, forming what has been termed lymphatic bubo. In a few instances we may find two of these buboes in the same individual.

In an hospital patient, in September, 1833, one of these buboes took place a little anterior to the pubes, and another in the central line of the pubes, a little above the penis. These arose from rather a large chancre on the external surface of the prepuce, near to its orifice, and on its dorsal aspect.

In a private patient, I lately saw one small bubo a little anterior to the pubes, and another between the pubes and left groin. So that there is no determined point at which these must occur. It is curious that, although one of these buboes may go on to suppuration, especially when mercury disagrees with the system, yet we rarely, if ever, see the second run into this state—it slowly retires.

CHAPTER VI.

ON A DISEASE OF THE LYMPHATIC GLANDS OF THE GROIN,
ATTENDED WITH PECULIAR SYMPTOMS.

The following account was published in the Dublin Hospital Reports, in the year 1818: I have thought it advisable to introduce it here, in reference to the subject of the preceding chapter.

One of the lymphatic glands of the lower or femoral range is generally the seat of this disease. Sometimes, however, it is seated in one of those of the upper or inguinal row. I have never had an opportunity of seeing the disease in its incipient state, the patients not having applied to me until the swelling had attained the size of a walnut. At this period the integuments are not in the slightest degree discoloured, nor is the surface shining. The inconvenience of which the patient complains, is a slight pain which he experiences in walking or in making any considerable exertion with the lower limbs. The progress of the tumour to suppuration is uniform though slow; the integuments become red, but not pointed; and the matter is spontaneously discharged at a period varying from the fifth to the eighth week. The cavity of the abscess is small in proportion to the extent and hardness of the tumour. The matter is in general of a tolerably good consistence: not unfrequently a second, and sometimes even a third, collection of matter forms in the neighbourhood of the first, the tumours exhibiting the same indolent character. The openings by which the matter escapes are narrow, and spread not to a large size, preserving rather the appearance of fistulous orifices than degenerating into broad ulcers. In general they heal spontaneously in the course of two or three months from the period of ulceration; but I have met with some few cases in which they became complete fistulous ulcers, and remained open for the space of even twelve months, the patients having refused to submit to the surgical treatment which fistulous ulcers require. A very striking feature of this disease is the trifling degree of pain which attends it: the patient suffers so very little as to be capable of walking about without any perceptible lameness. I have known some of them, in the situation of merchant's clerks, continue to lead a very active life under this complaint, doing the out-business of the house, as they term it, during the entire progress of the disease. In fact, the patients generally complain more of the bulk than of the pain of the swelling. One case only occurred to me, where the pain was such as to require the abscess to be opened with the point of the lancet; and in this instance for three or four days after the opening had been made, the patient experienced the most unaccountable soreness and pain from this very trifling operation. In some few cases, while the tumour is approaching to suppuration in one groin, the glands of the other begin to swell, and in a rare instance, now and then, the tumour having arrived at suppuration, remains for a time stationary;

the matter is then gradually absorbed, and the swelling at length slowly removed.

This disease usually occurs in men between the ages of twenty and forty, but in general nearer to the former than to the latter period of life. I have met with only one instance of it in a female, who was about thirty years of age.

From the very earliest period at which I have had an opportunity of observing this disease, the constitution is found to be engaged. The patient is affected with headache, which is more severe in the morning, and which is increased by stooping; he also admits, when questioned, that he feels more fatigue than usual from long continued or violent exertions, his pulse is quick, being in no case, when he is out of bed, under 100, and generally beating 120 in the minute. This quickness of pulse appears the more extraordinary, as it is obviously not produced by a high degree of pain, nor is it accompanied by a discoverable derangement of any other of the functions; on the contrary, the countenance is natural, respiration easy, skin of temperate heat, and not very dry, tongue clean, appetite as good as usual, and scarcely ever nocturnal sweats; the patient, however, feels himself more comfortable in the open air than when confined to the house.

I have had an opportunity of examining one patient only, while lying in bed in the morning. His pulse was then only 72, but on his rising and dressing himself, it rose to 110. The tumour at this time was as large as half a hen's egg, and the integuments were not discoloured.

The patients generally conceived that their health was improved by this disease; for before the final healing of the ulcerated opening they have informed me, that they felt themselves in better health than they had enjoyed for some months previous to the attack.

In the treatment I have confined myself to those means which I have conceived to be calculated to mitigate the severity of the symptoms, and to promote suppuration, which in general indeed seemed an unavoidable, and always a salutary termination of the disease. The headache appeared to be alleviated by no class of medicines but by purgatives. These were repeated every day or every other day, until the symptoms were completely removed. Very large doses were often required to produce the desired effect. The removal of the headache was not attended with a diminished frequency of the pulse. Poultices, warm fomentations, and gum plasters, were the only topical applications to which I had recourse. Leeches had been applied in two instances, before I saw the patients, but apparently without any salutary effect. Cold, and as they are termed, repellent applications, when used for a few days in the earlier stages of the disease, did not appear to produce either benefit or injury.

A knowledge of this disease may probably assist us at some future day in developing the pathology of the lymphatic system, which remains still involved in considerable obscurity, and will at all events be of some use, I trust, in practice.

I cannot say, from observation, what consequences would result from the exhibition of mercury in this complaint. But I apprehend that we have every thing to fear from administering that medicine to patients affected with such an extraordinary quickness of pulse. Indeed the very apprehension of evils that might thence result, has deterred me from ever putting the matter to the test of an experiment.

We should be careful to distinguish cases of this disease from examples, do doubt very rare, of truly venereal enlargement of those glands, wherein the swelling of the gland precedes, for some days, the appearance of the chancre. By attending to the constitutional symptoms, so characteristic of the disease here described, we shall with certainty avoid this error.

I may here observe, that in some instances, when an enlargement of the inguinal gland arises from the drying up a venereal chancre without the use of mercury, the patient will, as in this complaint, be affected with severe headache and quickness of pulse. Such cases, however, will scarcely be confounded with the disease here described; for the previous ulceration of the genitals in the one case, and the absence of that symptom in the other, are sufficiently characteristic, and though the quickness of the pulse and the severity of the headache be common to both, yet these constitute almost the only constitutional symptoms in the one case, while in the other they form but part of a series of alarming derangements of the system, such as remarkable prostration of strength, loss of appetite, and profuse night sweats. In short, the one case presents us with a striking picture of general disease and debility; while the other exhibits every character of general health, except the affection of the head, and the extraordinary quickness of the pulse.

[Since the preceding observations first appeared, I have had many opportunities of treating this disease, and I have met with four or five cases in which the patient was reduced to a state of extreme weakness, emaciation, and hectic, by repeated suppurations and profuse discharges; and I am happy to say that I found a certain and rather speedy remedy for all this alarming extent of disease in sea air and tepid salt water baths. Of course tonic remedies formed a part of the treatment, but in my opinion the credit of the cures must chiefly be ascribed to the sea air.]

CHAPTER VII.

ON SECONDARY SYMPTOMS.

When a primary symptom has been long neglected, or when treated injudiciously or carelessly, it may happen that the first series of secondary symptoms shall make their appearance before

it has been removed, and thus the patient may labour under both primary and secondary disease at the same time. In some cases the condition of the primary symptoms does not appear to undergo any change in consequence of this accession of disease; but in other instances we find it to be materially affected. It is not very uncommon for the surgeon, in treating a chancre of an old date, or an ulcerated bubo, when he has brought them into a healthy state to find his hopes disappointed for the present, and to see this ulcer most unaccountably change its appearance, and take an unfavourable turn, either by sloughing or assuming the phagedænic character; and this unfavourable change will, in spite of the most judicious treatment continue for eight or ten days, until the secondary symptoms are fully established.

Nor yet is it very uncommon for a primary symptom which has been obstinate and has for many days undergone a very unfavourable change, suddenly and unaccountably to assume a healthy aspect, and for a few days make rapid advances to healing; this progressive improvement, however, is checked as soon as the secondary symptoms are fully developed. I freely confess that I am unable to explain why such different and opposite effects should result from the same cause, viz. the development of the secondary symptoms. This is a point which deserves close and attentive observation, the discovery of it may lead to some useful hints to guide our treatment of obstinate primary symptoms.

When this combination of primary and secondary symptoms is treated by mercury, we shall observe that both forms of the disease will come under the influence of its action at the same time. No doubt some secondary symptoms, viz. eruption and sore throat, are apparently much more early affected by it; thus an eruption will have sensibly declined before the chancre or ulcerated bubo will have assumed the aspect of a granulating ulcer. But if we closely watch the primary ulcer we shall see as early, though not as signal, an impression made upon it. The assertion that the secondary are cured sooner than the coexistent primary symptoms, appears to me to be derived from a hasty and superficial view of the subject, from mistaking the great amendment in the former for a cure, and that only in two symptoms, sore throat and eruption. For if we chance to meet with the rarer case in which primary and secondary ulcers in other situations coexist, we shall surely see the primary healed some time before the secondary ulcer, and that too in cases where both are nearly of equal size.

In treating of the history of the venereal disease, I expressed my regret that Mr. Hunter had not followed out the course of the disease beyond the appearance of secondary symptoms, omitting all those constitutional changes and diseases which intervene between this period and the fatal termination. Again we have to regret that he has described the secondary symptoms in such a manner as to give only a single description for each class. Thus in speaking of venereal sore throat, he has described only one form of ulcer; no doubt he has hinted at one or two varieties under which the

venerae eruption appears, but he has glanced at these in such a manner as can convey very little information on this subject to an inexperienced person; while on the subject of venereal sore throat he has not even once alluded to the vast variety of features which this class of secondary symptoms presents, according to the modifications which the disease may have undergone from peculiarity of constitution, or from the influence which previous courses of mercurial or other treatment may have induced.¹

Every person, however, who has paid even moderate attention to the secondary forms of the venereal disease, will admit the accuracy with which Mr. Hunter has described the order of parts successively attacked. No doubt, as he has remarked, we occasionally meet with exceptions to this rule, and some of the parts second in order will be affected before those which are generally the first. He has not attempted to account for this phenomenon: from a good deal of observation I am disposed to ascribe it, in some cases to the maladministration, and in others to the excessive use of mercury, by which both the healthy and morbid actions in the system have been disturbed and deranged.

When we enquire into the time at which the secondary disease has succeeded to the first inoculation, we shall find it to differ in different individuals, and we shall also find that it is influenced by the previous treatment of the primary symptoms. Where these have been treated on the non-mercurial plan we generally observe that the secondary symptoms are later in appearing, and that they are also preceded by less previous disturbance of the system; but when mercury has been used for a short time only, or has been discontinued as soon as the chancre had healed, we shall find in such cases that the secondary symptoms will appear more early. It is generally admitted that if febrile action be excited by ordinary causes, this very action will eliminate the virus and make secondary symptoms display themselves at an earlier period. In some persons, however, secondary symptoms do not occur until after a very long interval of time, perhaps six months.

For some days before the secondary symptoms appear, the patient feels himself out of order, is languid in the evening, unwilling to use either mental or bodily exercise, and often complains of pains in the shoulders or legs; these do not remain fixed, but at different times they affect different parts; his sleep is unrefreshing. these fugitive pains all cease as soon as the eruption or sore throat appears.

The latter affection is at first attended with slight uneasiness in swallowing, in the course of a few days this amounts to pain, a dryness is also felt in the throat when the patient awakes at night,

¹ It is remarkable that Mr. Hunter has given only one form of each symptom, whether primary or secondary—e. g. one form of chancre, one of venereal sore throat, the same of venereal eruption, and on the subject of nodes he is equally limited. Perhaps he intended only to sketch the great outlines of the symptoms, reserving for a subsequent opportunity his observations on the varieties which each order of symptoms occasionally presents.

and his efforts to swallow saliva are productive of more pain than his attempts to swallow food or drink—a slight external tenderness and swelling are now discoverable in the site of the tonsil. On inspecting the throat we observe one tonsil or both swollen, with increased redness, and we readily discover an ulcer which Mr. Hunter describes as “a fair loss of substance, part being dug out, as it were, from the body of the tonsil, with undermined edges: this is commonly very foul, having white thick matter adhering to it like a slough, which cannot be washed away.” The patient complains of pain running upwards in front of the ear and occasionally down the side of the neck even to the point of the shoulder.

This form of venereal ulceration of the throat may be looked upon as the type of the genuine venereal sore throat. However strongly the characters of the ulcer may be marked, still we must not rely (solely) on the present appearances; we should trace back the history of the previous disease, look to the interval which has elapsed, enquire into the premonitory symptoms, as also into the treatment which had been employed for the cure of the primary disease.

Having satisfied ourselves of the nature of the disease, we next enter upon the treatment, which must be conducted according to the rules already laid down for the treatment of secondary symptoms. I need not repeat the admonition of taking care to excite the mercurial action in the manner most likely to insure its sanatory operation, to produce the least possible injury to the constitution, and yet to excite and keep up such a mercurial action as we know is most likely to effect a permanent cure of the venereal disease. This action I need scarcely say will require, in general, to be kept up for eight or ten weeks. In this, as in primary chancre, I would abstain from local applications to the ulcer, as the changes which the latter undergoes will, in various instances, assist us in discovering when mercury is beginning to disagree with the system; besides, we must be guided in our opinion as to the proper duration of the mercurial course by a reference to the period of the healing of the ulcer in the throat. Should we be so unfortunate as to have merely caused the ulcer to heal without at the same time thoroughly eradicating the disease, we shall find that the ulcer will return, in the same or in the other tonsil, and with precisely the same characters as the first ulcer in the throat had done.

The perfect cure of the disease is not at all times enough to satisfy the patient; for we are often called upon by a patient whom we have cured of a venereal sore throat, but who is in great alarm, and states that he is not cured, that he feels his throat as bad as ever, that he has the very same pain in swallowing, and the very same uneasy sensations which accompanied the former ulceration; yet, on inspection, every part of the throat appears in a healthy state. On the closest examination we cannot discover any thing morbid, except occasionally some very slight appearances of inflammation. Now all this alarm is groundless; it arises from the

facility with which morbid sensations are renewed. We sometimes trace this alarm to a local excitement caused by a fresh cold, sometimes to a derangement of the stomach or bowels, and in some few cases it is the offspring of slight hypochondriasis. I think the practice of washing and rubbing the throat externally, will prove the best means of preventing or removing this disquietude. Country air and sea bathing are also of the greatest service.

The venereal ulcer of the throat, though generally seated in the tonsil, will yet in some instances fix itself in a part where it is very much concealed from view; and therefore we should be prepared to search for it, when the sensations of the patient lead us to apprehend the existence of such an ulcer. In one or other of the following spots we shall discover these concealed ulcers. Sometimes we meet with a patient who complains of very severe pain whenever he attempts to swallow, and which occasionally is so constant as to deprive him of sleep: yet on inspecting the fauces we are surprised to find that all within our view appears in a healthy state; no ulcer can be seen, not even any appearance of inflammation in any part. This first view, however, should not satisfy us—we should consider in what points an ulcer may exist, and lie concealed; the most common place for such to occur is on the back part of the pharynx, and there it may be concealed by the interposition of the velum palati: we should therefore desire the patient to inspire as fully as he can; in attempting this he raises the velum, and if we then look into the pharynx, we shall generally discover the lower part of an ulcer; this of course leads us to make a more full examination; to effect this we must depress the tongue, and with a curved probe raise up the velum.

The ulcer, which now becomes more fully exposed to view, is of a circular form, is sunk deep in the substance of the pharynx, the surface is rather foul, but not at all sloughy, the surrounding inflammation extends a very short distance beyond the margin of the ulcer. The present sufferings of the patient loudly call for speedy relief, as he is not only deprived of the power of taking nutriment, but is sometimes kept in a high state of irritative fever; here we must use topical applications, although by so doing we lose the opportunity of watching the progress of the ulcer towards healing. We should rub the entire surface of the ulcer with muriate of antimony; the pain which this occasions is no doubt severe, but it is of very short duration, and the patient will soon enjoy sleep, and swallow without any suffering.

The best mode of applying the muriate of antimony is by means of a little lint rolled pretty firmly on the eye-end of an aneurism-needle, and dipped in the liquid. We should take great care that the application be confined to the ulcer, for should any of this fluid trickle down towards the larynx, it will cause a most distressing sense of suffocation, one which sometimes alarms the surgeon as well as the patient and his friends.

All the misery attendant on ulceration of the throat will sometimes be found to proceed from an ulcer of the pharynx, situated

below the level of the base of the tongue, and therefore when we cannot discover any ulceration of the tonsils, or back of the pharynx, high up, we should carefully look for it in the lower part of the latter; indeed we should be doubly solicitous to discover it, as an ulcer situated so low down may creep still lower, and spread to the sides and top of the larynx, producing there such mischief as must lead to a certain, though often a slow death.

The ulcer low down in the back of the pharynx, generally presents a foul and sometimes a sloughy surface, seldom assuming the venereal character described by Hunter, and has this remarkable feature, that its lower edge is very deep, while the upper part of the ulcer is superficial. A pretty constant symptom complained of by the patient is, that when he attempts to take any food, the morsel stops at a certain point, and can only be got down by his taking after it a sup of liquid: in proportion as the ulcer improves, the power of swallowing solids improves also.

The ulcer once discovered, should be very well rubbed with muriate of antimony; taking very great care, however, to prevent it trickling down to the larynx.

Another position in which we sometimes find a venereal ulcer, which causes not only pain in swallowing, but also pain shooting up one side of the head and face, is close to the insertion of the anterior palatine arch into the tongue. If the latter symptom be absent, the ulcer will be found about the central part of the base of the tongue. In making an examination of the throat in such a case, we are frequently warned of the existence of the ulcer, by the severe pain which we cause to the patient, when, in attempting to depress the tongue by the spatula, in order to search the throat as low down as possible, we chance to lay the instrument on the ulcer.

The ulcer will be found deep and foul, but not at all sloughy; and whether it be seated on the dorsum, or near the edge of this fold, its exquisite sensibility should be immediately destroyed by touching the surface with strong solution of nitrate of silver, or with muriate of antimony.

In a few instances we observe that the voice of the patient is rendered very nasal, and this sometimes even on the first appearance of the venereal sore throat and eruption; and yet neither the situation nor the condition of ulcer visible in the fauces will enable us to account for this symptom. In this form of the disease, we find that the patient not only suffers severe pain in any attempt to swallow, but he is also teased by frequent desire to draw down the mucus from the back of the nares; and this secretion, when coughed out, is often found slightly tinged with blood: a smart degree of fever also generally attends.

The ulcer in this case is seated behind the velum, high up in the angle between the upper and back part of the pharynx, or at the junction of its occipital and vertebral portions.

In this case we should endeavour to allay these sufferings as soon as possible; no benefit whatever can result from our waiting in the

expectation of its being healed during the mercurial action ; and as the ulcer is out of sight, we cannot derive from it any information to guide us in the administration of the mercury.

The patient will be materially benefited by our rubbing to the ulcer some liquid caustic, such as a strong solution of *argentum nitratum*, ℞j. ad ℥j. by means of lint wrapped round the end of a silver aneurism needle. Here let me caution those who adopt this practice, against the danger of this lint slipping off, and remaining behind the uvula, when the aneurism needle is withdrawn : should this occur, the patient will be perfectly miserable as long as it remains there ; and yet such is his impatience, that he will not, or cannot, submit to the ordinary means in use for dislodging it. To avoid such an accident, we have only to pass one end of the lint through the eye of the needle, and then wrap the remainder about it.

When the ulcer is seated on the posterior surface of the velum, rather an uncommon case, we are not only directed to its exact seat, by an appearance of thickening, together with a blush of redness on the anterior surface of the velum, which appearance corresponds to the seat of the ulcer ; but we can gain a positive knowledge of its situation, by carrying behind the velum an aneurism needle armed with lint, and rubbing it to the suspected spot ; if there be an ulcer, the lint will be covered with the discharge from it. Here also the immediate application of liquid caustics to the ulcer is indispensable.

Although I have spoken of these as pure original venereal ulcers of the throat, yet I am doubtful whether this arrangement be strictly correct. For although I can recollect instances in which the original ulcer first fixed itself in some of those concealed situations, yet I cannot speak with certainty of them all ; and I freely admit that in the relaxed sore throat, the ulcer will frequently be discovered in some of the above positions.

There is an affection of the throat of which those who suffer from it complain repeatedly. It is by no means confined to those who labour, or have previously laboured, under venereal disease ; and is occasionally met with in females of most unblemished characters ; still when it occurs in a patient who has recently been afflicted with syphilis, it is apt to create much mental uneasiness. I allude to that condition of the mucous membrane of the back of the pharynx, in which it is seen to be covered with an uniform thin crust of whitish or yellow hardened mucus : this of course is more troublesome in the morning, when it is found to be perfectly dry and hardened, than it is in the after part of the day, when it has been broken into detached pieces, some of which have been removed in the act of deglutition.

This affection, as far as my observation goes, is very obstinate and very tedious : I have known it continue not only for months, but for years. However, though very obstinate, it does not prove dangerous ; for at the end of some years we find the parts in precisely the same state as that in which we saw them when the case first came under our notice. The nature of this disease is very

readily ascertained ; it is only required to rub off the mucous crust gently with the probe wrapped round with lint, and then we shall see the membrane perfectly free from ulceration, and in no way morbid, except that it may be a little more muscular, rough, and dry on the surface, than it is found to be in its healthy state. The diagnosis of course is then easy, but the means of cure are by no means either easy or certain. I have known some cases much relieved by gargling the throat with sea-water, and others to be, for the time at least, apparently cured by sea-bathing ; but I have known both fail in many instances : I have, however, never known any case in which the disease degenerated into a worse condition, although I have watched some for ten or twelve years.

I have already said that ulcerated venereal throat is often materially changed in its characters by an unsuitable line of treatment : this assertion will be found to be strongly corroborated by the appearance which the parts present even when healed. How frequently may surgeons observe, on looking into a throat which has suffered severely or repeatedly by venereal ulcers, that these now exhibit that smooth, shining, silvery surface, which we always see in those spontaneous ulcers occurring in young people, and which are by many called scrofulous ulcers of the throat. Whereas those venereal sore throats which heal kindly, and which have not undergone any very bad change in their course, will be seen to present a healthy surface, similar to that of the rest of the mouth, with only occasionally a slight depression at the part.

For practical purposes we shall find it of much advantage to attend to these appearances. Suppose, for example, that a patient comes to us complaining of a relapse of his sore throat, and that we discover an ulcer in a fresh part, while the silvery cicatrix is seen in the site of some former ulcer, we are at once led to suspect that this patient's system must have been a good deal broken down by the previous treatment ; and we are warned to avoid the dangers of precipitating him again into a similar state, by employing mercury in a manner suited only to an unbroken system. Before, however, we come to any positive determination in such a case, we should make particular enquiries as to what had been the local treatment of the ulcers, for the application of a very strong caustic to an ulcer of the throat will be followed by a silvery cicatrix of such ulcer.

The patient who is labouring under venereal sore throat, has not only to complain of the pain which he suffers, but is also sometimes afflicted with a flow of saliva, which pours almost incessantly from his mouth by day, and which falling back on the larynx when he lies down, threatens instant suffocation, and altogether deprives him of sleep. I know not why it is that this incessant flow of saliva attends some cases, and is absent in others. I think this symptom does not depend on any particular situation, or any particular form of the ulcer. I need scarcely say that the diminution of this discharge is one of the first signs of amendment.

Another distressing symptom which occasionally attends on

venereal sore throat, is the regurgitation of the patient's drink through the nose. This alarms the patient excessively; we can, however, relieve his anxiety, by assuring him that this will cease when the ulcers have healed. Indeed it is surprising to see how very well many of those unfortunate persons can ultimately swallow, even though they have lost a considerable portion of the soft parts about the palate and fauces. The powers of deglutition in these persons often become wonderfully restored; partly from the contraction which occurs, during the healing process, in all the surrounding parts, and partly from the power which the muscles possess, either of accommodating themselves to their altered condition, or of acquiring some new or peculiar mode of action.

Perhaps in the wide range of surgical diseases, we cannot find any one so liable to be materially changed as secondary syphilis; I shall not say in its nature, but certainly in its appearance, and in the course of its symptoms, as also in the line of treatment suited to its cure. These extraordinary changes some authors have endeavoured to account for, by referring them to a scrofulous, or to some other cachectic state of the system of the individual. In my opinion too much stress has been laid upon this explanation; for if we confine ourselves to those cases in which, from ignorance on the part of the patient, the disease (suppose a venereal ulcer of the arm) has been undisturbed by any active measure, and has been treated only by purgatives, poultices, and mild ointments,—in such instances we do not observe that the genuine characters of the venereal sore have been modified or altered by the state of the general system; that is, it still remains a venereal ulcer.

I would merely ask a surgeon, who entertains this opinion of the influence of the habit in modifying secondary venereal ulcers, whether he would undertake, by examining a secondary venereal ulcer in any patient, to pronounce from the appearances there exhibited, that this individual is of a scrofulous habit.

In my judgment, the great varieties in the appearances and nature of venereal sore throats, are occasioned by the manner in which mercury has been used, either for the cure of primary, or for the treatment of the secondary symptoms. No doubt when mercury is used injudiciously, and in a manner unsuited to the general health and condition of a patient, we shall find that it causes more mischief, and produces more strange changes in the venereal ulcers of the throat, if the patient be of a highly scrofulous, or of a very delicate habit, than if he be of a vigorous and healthy constitution.

Among the secondary symptoms of syphilis, we cannot find any which are more strikingly influenced by injudicious treatment, (conjoined with peculiar states of the general system) than ulcer of the throat. To describe all the varieties of these which are thus produced, would be an useless and almost an endless task; but I think it may not be without benefit to say a few words in particular on one which is the most commonly met with, differing however

in its site, and in its extent, in different instances; as also briefly to notice one or two other varieties.

In a case where a genuine syphilitic ulcer of the throat has been treated by an irregular or excessive course of mercury, and has healed under this treatment, we shall often find the patient suffer what he terms a relapse of sore throat. The new ulcer, whether it appear in the site of the former one, or whether it occupy some new position, will be found to differ most strikingly from the original ulcer. This appearance, which may be very frequently observed, is that of a superficial ulceration, of rather a whitish colour, with a good deal of surrounding redness, and some slight degree of swelling; in fact, it presents many of those characters which might lead some to call it an aphthous ulcer. If we watch the course of this ulcer, we shall frequently see that it creeps along from place to place; that unless it be seized by phagedæna, or sloughing, it appears to be rather indolent in its nature, and mild in its character; thus it admits of being healed, or almost healed, by various topical means, assisted perhaps by some tonic or alterative internal medicines.

A vast variety of ulcerated throats will be seen between this well-marked type of the Hunterian sore throat, and this aphthous-like ulcer. To describe each of these, would be both a vain and an useless task, for the judgment of the surgeon alone must direct the treatment, and suit it to each particular case, according to the existing circumstances in each. Thus an aphthous ulcer of this kind, in the person of a robust man, not labouring under irritative fever, will require and will bear such a course of mercury as would exasperate a similar ulcer in a patient whose system was affected with a high degree of this fever; nay, the misapplication of this treatment might even endanger the life of the patient. I need not add, that the state of the ulcer itself should also influence our line of treatment; for if phagedæna or sloughing should seize upon it, we must prescribe for, or according to, these altered conditions of the ulcer, instead of prescribing according to the name of the disease, a "relapsed venereal sore throat."

One of the most alarming aspects which venereal sore throat exhibits, is the following:—On inspecting the fauces we find the entire of the velum, and both tonsils, in a state of sloughy ulceration, and the back of the pharynx appears converted, as it were into a soft pultaceous mass; indeed, sometimes we see all parts of the throat covered with this soft slough; by rubbing these parts with lint wrapped round the end of a probe we ascertain that this covering adheres tenaciously to the surface. The patient is scarcely able to swallow even a sup of the most bland fluid; by day a constant flow of rosy saliva issues from his mouth, and he complains that by night he is not only deprived of sleep by the pain of his throat, but that he is prevented from lying down, for in that position he is in danger of being suffocated by the viscid saliva passing down his throat. His general health is completely broken up, he is emaciated to an extreme degree, his strength is quite prostrate,

pulse extremely quick, and skin hot ; in fact he is in a very high state of fever, which is of the hectic type. In a word, I do not think that a more pitiable and alarming combination of symptoms is scarcely ever presented to the notice of the surgeon.

When we enquire into the history of such a case, we learn that this unfortunate man had undergone repeated slight courses of mercury, or one or two very severe ones, for the cure of the venereal disease ; that these, for a time, relieved the symptoms, but that on desisting from the use of mercury the disease of the throat had relapsed, and had assumed the present appearances. I believe that the usual mode of treating such cases is to give sarsaparilla in decoction or in broth¹, and at the same time to endeavour to arrest the ulceration of the throat by various topical applications : under such treatment many recover, but with no inconsiderable mischief done to the throat, and after tedious and severe sufferings.

Now this is precisely one of those cases in which *very small* doses of mercury will be found of the most signal service ; although I make no doubt but many surgeons will be startled by the mere proposal of using mercury under such discouraging circumstances.

I shall adduce the following as one instance out of many, to prove the safety and the benefits of this line of treatment.

James Johnston, æt. 40, 12th ward, admitted January 10th, 1836. A number of ulcers with dark brown scabs, but not of a conical or rupia form ; these scabs are of an oval figure, are surrounded by a red defined zone, between which and the edge of the scab runs a yellow ring containing pus. One of these ulcers is on the left side of the nose, one on each eyebrow, two on the forehead, one on the chin, one on the left shoulder, one on the sternum, and one on the left leg. The arches of the palate, uvula, and tonsils are deeply ulcerated ; the entire surface of the pharynx is converted into, or covered over by a soft slough, like half-boiled flummery. Has great pain and difficulty in swallowing—there is a constant copious flow of thin saliva ; he complains of pains of shoulders, sleeps very badly (p. 144). He is very much emaciated and very weak. He states that thirty weeks ago he first perceived a bubo in his left groin ; at this time he had neither ulcer on penis, nor discharge from urethra. He took pills, by which his mouth was made sore ; the bubo having spontaneously opened in three weeks. After this he remained well for about seventeen weeks, when he felt his throat sore. For this he was treated in the infirmary at Liverpool, using pills by which his mouth was made slightly sore, and his throat was cured. In ten weeks after leaving the hospital, his throat again became sore, and again healed under a more severe salivation. Throat remained well for three weeks only. The ulcers began to appear six weeks ago.

¹ To three ounces of sarsaparilla sliced, add three pints of water ; let them simmer on a slow fire, until reduced to two pints ; take out the wood, and bruise it in a stone mortar ; return it into the liquor, with half a chicken, or half a pound of raw beef without fat. Boil slowly for an hour, and pour off the liquor.

January 10th. Throat to be brushed every second day with solut. arg. nit. Decoct. sarsæ ℞ i. acid nit. dil. ʒi. indie.

January 16th. Throat rather better, is scarcely able to swallow the decoction. Scabs stationary. Pergat.

January 26th. Two ulcers, one on each eyebrow, show the honey pointed form of rupia. Two others of the ulcers which have been dressed with ointment, exhibit a flabby surface very different from ordinary secondary venereal ulcer, and are devoid of the yellow ulcerated margin of such ulcers; the flow of saliva continues unaltered. The throat as on admission. Repet. decoct. sarsæ et garg. chl. sodæ. Ung. hyd. fort. gr. x. o. n.

January 30th. Mouth is sore from the mercury. Complains of weakness, can swallow fluids only. Ulceration of throat less sloughy, scabs on the face appear as if of less extent, those which had assumed the rupia shape have dropped off. Repet. decoct. sarsæ, garg., et ung. hyd. Porter ℞ i. indies.

February 6th. Throat now presents one clean ulcerated surface; left-tonsil seems to have been entirely removed; scabs drying and dropping off, those that remain are of much less extent; has some purging, yet his countenance is good. Since 2nd inst. has used the ointment only every second night. Mixt. c. decoct. hæmatoxyli creta ppt., Tr. opii, et Tr. catechu urgente diarrhœa.

February 9th. Purging continues; says that he was up twenty times last night. Countenance good; scabs are smaller. Haust. anod. c. Tr. opii gut. xxx. Vini rub. ʒiv. indies. Mist. cretæ c. Tr. opii urg. diarrhœa.

February 16th. Throat quite healed, exposed ulcers healing rapidly, scabs have almost all fallen off, bowels regular, ptyalism continues.

February 20th. He is evidently stronger and now out of danger. Although his throat is healed he complains of soreness lower down, and he points to a part on a level with the top of the larynx as the seat of soreness. Says that solid food is apt to stop there, and it requires to be assisted by taking a sup of fluid. When drinking, some of the fluid passes up through his nose; ulcers are much more contracted, and with surfaces perfectly healthy; general appearance vastly improved.

From this time he was ordered pulv. ipecac. comp. at bedtime, a repetition of his porter, and inf. cinchonæ c. Tr. cinch. comp. et Tr. opii, until April 5th.

On March 1st, swallowing improved, but some of the drink comes through his nostrils; all the ulcers are nearly healed.

March 28th. Swallows quite well, none of the fluid regurgitates through the nostrils when he drinks. For ten days past has complained of pains of his upper limbs, and of his knees. Profuse night sweats, sleeps badly, appetite declining.

It is unnecessary to prosecute the details of this case farther. I shall only add, that a subsequent use of mercury, carried to salivation, did not cause the ulcer of the throat to break out again.

I shall have occasion hereafter to explain by what principles I was led to use mercury in this case.

It not unfrequently happens that these relapsed ulcers of the throat spread along, from part to part of both the fauces and palate, and at times occupy a very considerable portion of both. One rare and unpleasant consequence of this extensive ulceration of these parts is, that in their closing together and healing they form so complete a partition between the mouth and nose that not even the air can pass through, and thus the patient is for ever after prevented from blowing his nose. Those who have not reflected on the strange approaches that ulcerated parts make towards each other in the act of healing, may doubt the possibility of this occurrence; I have seen at least four or five instances of it, and one of them happened to a patient while under my own care.

William Clarke, æt. 18, a delicate looking boy, admitted into 11th ward, March, 1836. Twelve months ago he was treated for ulcerated tonsils, an ulcer on inner surface of prepuce, and a small node on forehead. Mercury was used pretty freely, but it seemed not to act favourably; in three months after this supposed cure, the throat again became sore. His present symptoms are an ulcer on the back of the pharynx, the upper end of which is pretty much on a level with the dorsum of the tongue, it extends downwards for an inch, it is full half an inch in breadth, being nearly as broad as the back of the pharynx; all its edges are steep, surface covered with a thick tenacious purulent discharge; this ulcer is void of surrounding swelling or inflammation; he complains rather of difficulty than of pain in swallowing, for he feels that the morsel is stopped at a certain point, and requires a sup of fluid to make it go down; node on tibia is remarkably small, and gives very little pain.

April 12th. Appearance of the ulcer is very much improved, and he says that his power of swallowing is so much better that now the food scarcely stops at all; general health very good.

April 19th. Mouth is now quite sore enough; says he feels his throat quite well, and has no pain on the site of the node, the swelling of which still remains. He now for the first time complains of a stuffing of his nose, and says that he had felt it for ten or twelve days past.

April 28. Mouth nearly well. He now complains that he cannot blow his nose; on examining with a curved probe I find that the communication between the mouth and nose is quite closed up. This has taken place within the last fortnight, since the time the ulcer lay down in the pharynx began to cicatrise.

This result is the more remarkable, because since his readmission into the hospital I could not observe any ulceration at the upper part of the pharynx, and because the highest end of the ulcer in the back of the pharynx did not reach within an inch of the opening leading to the posterior nares. He was discharged April 30th, no attempt to open the communication having been made.

That means may be discovered for preventing this perfect closure

of the parts, however impatient they may be of the presence of any foreign body, I can readily believe; but when once the mischief is completed, I fear that we must despair of being able to render any service, and for this reason, that the natural texture and properties of the mucous membrane towards the mouth are quite destroyed and altered, so that instead of the soft velvet-like surface, we see a shining white surface; and thus whatever assistance we might gain from having to deal with mucous lining to the part, is here altogether absent. Monsieur Cullerier, with whom I lately had a conversation on this subject, informed me that he had made some attempts by operation to restore the communication, but without success, the parts closed again in spite of all his efforts.

I shall not dwell at length on what every surgeon knows, viz., that venereal ulcers of the throat have in some instances induced ulceration of the carotid arteries, terminating in sudden death by hemorrhage. But I cannot refrain from stating the following case as illustrating in a rare manner the very mischievous effects resulting from repeated and injudicious courses of mercury employed in the treatment of venereal ulcers of the throat

Mr. A., an apothecary, æt. 34, was affected with a venereal sore throat, for which he applied to a surgeon of his acquaintance, under whose care he underwent not fewer than three salivations, and all of them very severe; some ulceration of the throat returning in a short time after each salivation. He then consulted another surgeon, who either directed, or permitted him at his own urgent entreaty, to subject himself to a fourth salivation. The soreness of his throat still remaining in some degree, and his surgeon having positively refused to renew the use of mercury, he became dissatisfied with him, and went through a fifth salivation without the advice of any surgeon. The throat still remaining sore, he sent for me, evidently with the hope that I would order him to resume the mercury in accordance with his own wishes. On enquiring into his symptoms, I learned from him that for some weeks past he was not only constantly confined to bed, but almost to one posture, for he could not turn himself in the bed by any exertion unless he applied both his hands to steady and support his head; that he was totally unable to raise himself in bed for the purpose of taking a drink, in consequence of the impossibility of supporting his head; and lastly; that he was suffering under severe pains of the arms. On examining the throat, which could only be done as he lay on his side, I observed a very extensive foul ulcer at the back of the pharynx.

This gentleman seemed very much displeased and not a little disappointed when I told him he should not use any more mercury. It is unnecessary to add that I directed for him a tonic plan of diet, but without the benefit of country air, for his removal was absolutely impossible. In about three weeks from the time of my first visit to him, on entering his room one morning he said, "Sir, I have here something to show you; it is a piece of bone that came from my throat, and caused such a fit of coughing as nearly choked me." On examination, this proved to be a portion of the ring of

the first vertebra, with on one side the one half, and on the other one third of the articulating processes. My alarm for his safety may now be readily conceived. I apprehended of course that in some unguarded movement of the head, either by his own voluntary efforts, or perhaps by the awkwardness of an officious nurse, the remaining ties of the head, with the first and second vertebræ, might be snapped across, and with these the thread of his life.

But contrary to my expectations, he felt himself daily growing stronger : he became conscious of some acquired power of moving the head ; this gradually improved, until at length he was enabled to hold his head nearly erect, but with so very little power of rotatory motion that he was obliged to turn the trunk of the body when he wished to view any object on either side. However his flesh and strength returned, he became corpulent, he married, and survived the loss of half his atlas by five or six years.

Before we dismiss the subject of what may be termed the pure or original forms of venereal sore throat, I shall only observe, that when any one of these affections is making an alarming progress, and by sloughing or by phagedæna threatens to destroy some important portions of the throat, or suddenly to endanger life by laying open some great blood-vessel, or more slowly, but not less certainly by the ulceration extending to the top of the larynx, I say that in such emergencies the surgeon has but two resources left, but two means of arresting the dangerous career of the ulcer, viz. the application of muriate of antimony, or some other equally powerful liquid caustic, or the use of mercurial fumigation. His judgment must decide which is best suited to the circumstances of each case. I shall only remark, that if we employ fumigations we cannot expect them in general to produce their sensible effects in a shorter period than two or three days ; then they are apt to excite very profuse and uncontrollable salivation, which although it is almost certain to arrest the further ravages of the ulceration, yet does not accomplish a permanent cure of the disease ; but on the contrary it leaves the system in a state badly able to bear the subsequent use of mercury.

All those cases which have been profusely salivated by fumigations, and in which a relapse has occurred, requiring a fresh use of mercury, will be found very difficult of cure.

One caution relative to the application of caustics I must not omit. In cases where the ulceration threatens to destroy the bony partition between the mouth and nose, we should confine the application of the caustic to the border of the ulcer ; if we apply it to the centre we shall be in danger of having it reach to the bone, and thus produce the very evil we are so anxious to avoid.

There are a few affections of the throat and mouth which sometimes follow shortly after a course of mercury employed for the cure of the venereal disease. It is a very remarkable fact that these affections appear only under such circumstances. For if mercury have been employed for the removal of any other disease, ex. gr. inflammation of the synovial membrane of the joints, disease of the

liver, &c., we do not witness any such troublesome consequences. Of these affections the following is rather a rare one:—

The patient complains of a tenderness of throat rather than of sore throat, says that if he eat some particular articles of food, ex. gr. currants or gooseberries, his throat feels more uneasy, not at the time of eating, but on the following day. Either one or both tonsils present a very irregular surface, of a peculiar yellow colour, sometimes without any ulceration, and sometimes with a few small very superficial ulcerations—at times a similar ulceration may be seen at the junction of the anterior palatine arch with the tongue. This peculiar colour of the tonsils is sometimes accompanied with one or more white spots on the edge of the tongue, across the diameter of which a slight fissure may run. This affection of the throat may, after a few weeks, disappear and remain away for some days, then return nearly as before. With these local affections the system does not appear to sympathise, for the general health continues undisturbed. The patient, if particularly questioned, admits that there is no soreness of either the tongue or throat. This affection will continue for many months gradually retiring, by leaving the patient free, at first for a few days, and then for a week, and at length for a month or two; finally it disappears altogether. I have not seen any other suspicious symptom attend this affection.

For the cure of this affection I have known most severe courses of mercury employed, so as to excite very profuse salivation, and these even repeated more than once, but without effecting any other than a momentary improvement in the state of the symptoms, and this improvement has ceased as soon as the ptyalism began to subside. Most assuredly this state of the throat does not require, nor will it be benefited by, the use of mercury. The treatment which I have found most efficacious is to rub the parts very freely with sulphas cupri, or with argentum nitratum, daily, or every second day, generally alternating these applications. The more active caustics do not succeed better, indeed, not so well as those I have mentioned. I have known different preparations of iodine to have been employed; but I regret to say without affording any decided benefit. This affection is a striking example in justification of the phrase of a disease “wearing itself out;” for in my judgment time alone has effected the cure.

Mr. R—, in the month of January, underwent a full course of mercury under close confinement, for the cure of a venereal sore throat. Early in March he was in a profuse salivation, which his constitution bore with comparatively slight disturbance. He desisted altogether from the use of mercury not until 28th of April. On 3d June he complained of his throat and tongue. I find on the right side along the edge of the tongue, opposite to the molares teeth, two small fissures surrounded with white circular spots. At the point of junction of the anterior palatine arch with the root of the tongue is a small superficial ulcer of a brown or buff colour—right tonsil is enlarged. He says that at the end of six weeks, after each course of mercury, his throat has become sore; he brushes

over the affected parts with a strong solution of *argentum nitratum* every or every other day.

10th August, 1834. Now three months since he relinquished the use of mercury; complains that his throat, during the last fortnight, has become more tender, so that after eating fruit, especially gooseberries and currants, he finds his throat more sore on the next day. Surface of the tonsils is of a buff colour, with an uneven surface, which gives it the appearance of ulceration. I have observed that for some days together, the colour of the tonsil changes to the natural red colour. He rubs the affected parts with solid *argentum nitratum* occasionally, when the sensations become troublesome.

30th August. During the last fortnight he has not used the *argentum nitratum*, either in a solid form or in solution, as heretofore; he has merely gargled with sea water. On the right edge of the tongue is one small white spot with a fissure running across it; left anterior palatine arch has a very superficial white ulceration or excoriation along its edge; right tonsil, with a very irregular surface, has a yellowish superficial ulcer on its upper end, and another superficial sore is seen where the anterior arch comes in contact with the tonsil above; says he has not any soreness of the throat or tongue, except occasionally; general health-very good.

12th October. Superficial yellow ulceration of left tonsil still continues, although he has lately used the *argentum nitratum* as often as the uncomfortable sensations of his throat prompted him to do so; his general health is excellent; he has gained weight during the last five months. This morbid state of throat has now continued for five months from the time he laid aside the use of mercury.

24th November. Ulceration of both tonsils superficial, and of buff colour; he has been for days and weeks together without feeling any pain or uneasiness, and yet with the ulceration visible; at other times the ulceration becomes painful, and continues so for some days; he occasionally touches the ulcers with *argentum nitratum*, perhaps once in eight or twelve days. It is now seven months since he gave up the use of mercury.

15th January. His throat looks much better to-day than I have ever seen it; says that it remains well for seven or eight days, then begins to grow sore, and when this soreness has increased a good deal, he rubs it very hard with a pencil of *argentum nitratum*; the sloughs do not separate for two or three days; and so this course is run over and over again.

29th April. In January last, Mr. R.—consulted two of the most eminent surgeons in London, who assured him that his disease was not venereal, and could not be cured by mercury; he used iodine, but without the smallest benefit; still his complaint has not been removed; for now about the centre of the right tonsil there is a circular ulcer about the size of a split pea, edges very slightly raised, surface rather flocculent and of a yellowish colour, no surrounding swelling or redness; this is not attended with pain, even in the act

of deglutition; he merely feels at times a dryness of his throat: general health is very good; he has not touched the throat with caustic during the last fortnight; observe he had relinquished the use of mercury on the 28th of last April, exactly twelve months ago. N. B. In three months more his throat got perfectly well.

Another and more common affection of the throat following a mercurial course, employed for the cure of some venereal affection, is the following:—Over the anterior surface of the velum palati, or on one of the tonsils, or perhaps on some part of the inside of the cheeks, there appears an irregular wrinkled surface of a very white colour, looking not very unlike the mark or track of a snail, or as if the part had been brushed over with a brush dipped in milk. Sometimes the whitened surface retains its natural smoothness, and sometimes it is in parts wrinkled, resembling, in some degree, the skin of the hands when long steeped in hot water. The discoloured parts are sometimes free from ulceration, while in others we may observe a very superficial ulceration, or rather excoriation, and sometimes a fissure.

However, in some cases we find a distinctly ulcerated spot in the discoloured part, while in others again we find an ulceration of some part of the mouth remote from the white spot; and this appears with a raised or swollen white border, the enclosed ulcer being of a red colour, and more resembling an excoriation than a real ulcer. This affection of the mucous membrane is found in a few instances so very widely spread, that the entire surface of the mouth, throat, and gums partake of this morbid state.

A very remarkable, and yet a very constant, attendant of this state of mouth and throat is a very superficial ulceration or excoriation around the anus, so that almost as often as we question the patient as to the existence of such an affection, we may be pretty sure to be answered in the affirmative; and scarcely does any patient pass through this disease without suffering at one time or other from this excoriation around the anus. This affection is rather troublesome than painful, and it seems to disturb the general health very little, if at all; for we find the patient in the enjoyment of good health and good looks, and without the slightest disturbance of any one of the functions.

If unattended to, this disease may continue for a great length of time, certainly for many months, subject however to occasional variations; it may remain unchanged in one part, while getting well in another, or even fixing itself upon some new spot. What the ultimate result would be, if left entirely to nature, I cannot say; but I imagine that it would finally be overcome by the powers of the system, or, as some express it, “would ultimately wear itself out.”

However great may be the extent and duration of this affection of the parts within the mouth, if free from actual ulceration, nay, even though it be accompanied with a corresponding affection of the skin at the anus, still we should not be tempted to treat it by mercury administered so as to induce salivation, for such practice

will end in disappointment. I have seen the most full and long continued, nay even repeated, salivations fail in effecting a cure, and this whether the mercury had been employed by inunction or had been given internally: neither does the muriate or any of the other preparations of mercury, possess any peculiar power over this disease. No doubt, during the time that the salivary system is under the full action of mercury, the mucous membrane assumes a much more natural appearance, the whitish colour of the ulceration is removed, an unnatural degree of redness alone points out the seat of the disease; but as soon as the high action of the mercury begins to subside, and even before the mercurial soreness of the mouth has ceased, we observe with chagrin and vexation a return of the original affection in its pristine vigour.

I have known this affection treated by protracted courses of sarsaparilla alone, and combined with mineral acids, without the patient deriving the smallest benefit from their use. The application of solutions of argenti nitratum, or of sulphas cupri, has appeared to me the most useful line of treatment in this, as it is in that yellowish ulceration of the tonsils already described as a sequela to a mercurial course, when employed for the cure of the venereal disease.

I have described this affection as being sometimes free from any ulceration, while in other cases ulceration may be seen either in the discoloured patches, or in some other remote part totally free from this discolouration. Now, while we are assured that this affection, if unaccompanied by ulceration, is most certainly not a venereal symptom, and neither requiring nor benefiting by the use of mercury, yet we must admit, that when it is attended by ulceration in the discoloured parts, we cannot give a very positive opinion on this important point. After long and anxious endeavours to discover some feature in the ulcer or accompanying whiteness, which might enable me to decide this question, I freely admit that I have not been able to succeed, and that I am obliged to be guided more by the absence or coexistence of other symptoms which are unequivocally venereal. I need not say how very particular and minute we should be in our enquiries for other symptoms; for, should we form a wrong opinion, we may subject our patient to a course of mercury which is absolutely unnecessary, and which will prove unavailing; or, on the other hand, were we to declare that the use of mercury is unnecessary, we might thus give the patient unfounded confidence in his exemption from the venereal disease, throw him off his guard, and thus allow syphilitic symptoms to produce serious evils before he could think it necessary to apply for surgical assistance. Thus syphilitic iritis might, if unattended to, go on to the destruction of vision by inducing opacity of the crystalline lens, and closure of the pupil.

In the first of the following cases we have an instance of this affection existing along with undoubted venereal symptoms, and in the next we find this affection appearing without any such concomitant.

Mr. M— applied to me on 26th September, 1833. He informed me that six weeks ago he perceived a chancre on the inside of the prepuce, close to the frænum; for this he used twenty pills, which produced mercurial fætor of the breath, but no soreness of the mouth. Caustic was applied to the ulcer. For the last three weeks he has not used any medicine. At present the site of the chancre is marked by a red spot, the size of a split pea: this is rather an excoriation than an ulcer; it is of a very red colour, moist and very hard. On the middle of the flat surface of the tongue is a small superficial ulcer, with a fissure running across it. On the inner surface of the lower lip is a very superficial ulceration, of a circular form, the size of a shilling: a great part of this diseased surface is of a milky-white colour. There is a superficial ulceration on each tonsil, of the same white description as that of the lip. Sumat pil. hyd. gr. v. bis in die.

Oct. 6th. Mouth slightly affected; ulcer of the penis has less hardness, and is of a more healthy red; tongue is not much altered; throat appears to be well.

Oct. 18th. Mouth still slightly affected; ulcer of prepuce much better, though still moist. The ulcer of the tongue appears rather more extended; this I now rubbed with *argentum nitratum*. Ulcer on the inside of the lip is also more extended, and the white border which surrounds it shows a greater degree of softness, being more raised. Appetite good; he sleeps well. P. 112. Rept. pil. una bis in die.

Oct. 24th. He is now very fully affected by the mercury. Mouth very sore; fissure in tongue is healed; surrounding ulceration is rather more extended, and is now of a dirty yellow colour; ulcer of lip is also of a dirty yellow colour. He complains of weakness, but has no palpitation. Omittatur pil. hyd. R. Sulph. Quinæ gr. x. aq. ʒ vj. acidi sulph. dil: ʒi. Tinct. Card. comp. ʒ ss. M. ʒ i. ter in die sumenda.

Oct. 29th. Ulcer of prepuce not quite healed, although very much reduced in size, and some hardness remains; tongue unaltered; ulcer of lip has its border raised and hard, the centre skinned over and of a red colour. Fissure of tongue rubbed with *argentum nitratum*; ulcer of lip with saturated solution of *sulphas cupri*. Mouth is less sore.

Nov. 7th. He resumed mercury on the 3d inst. Pil. hyd. gr. v. bis in die. Ungt. hyd. fort. ʒ ss. om. nocte. Now he has an iron taste in his mouth; mercurial fætor of breath is pretty strong.

Nov. 13th. Since 8th inst. the ptyalism has been very copious, with considerable swelling of left cheek, and ulceration of left side of tongue. P. 126. Ulcer on surface of tongue is healed, that on the lip is more clean, with cuticle over part of it. Ulcer on prepuce clean, bleeding on the slightest friction, but the hardness continues.

Nov. 16th. He spits four pints daily. Ptyalism prevents sleep; thirst urgent. P. 90 only. Ulcer of lip as on 13th inst. Ulcer of prepuce is healed, very slight hardness remains.

Nov. 24th. Ptyalism less; saliva viscid; tongue and left cheek

still ulcerated; ulcer of lip as on 13th; ulcer of prepuce is healed, and perfectly free from hardness or thickening.

Dec. 4th. For last eight days has used ungt. hyd. 3 ss. omn. nocte, et pil. hyd. gr. v. mane et nocte, by which his mouth is again smartly affected. Gums are swollen and ulcerated, but there is not much pyalism; thirst urgent; skin not very hot. P. 98. Ulcer of lower lip not healed; a smaller but similar ulcerated spot now appears on the middle of the lip, near the frænum. Ungt. hyd. 3 ss. o. n. Pil. hyd. gr. v. bis in die.

Dec. 7th. Original ulcer of lip quite healed and of nearly natural colour; the small ulcer of lip remains unaltered. Omitt. pil. et ungt. hyd. Sumat mixt. c. sulph. quinae.

Dec. 27th. Mouth free from mercurial influence. P. 96. App. good; place of the larger ulcer of lip can be distinguished by its higher colour; the new small ulcer remains. For three days past he has felt some uneasiness in swallowing; on left tonsil is a broad very superficial ulcer of a dirty yellow colour.

Jan. 1, 1834. Appetite good, general health good, except that his pulse after walking is too quick. Ulcer of lip is enlarged; left tonsil as on 27th ult. R. hyd. cor. sub. gr. ij. resinæ guaiaci 3 ss. ft. pil. octo. Sumat. unam. sing. noct. Pulv. sarsæ. c. carbon. sodæ mane et meridie.

Jan. 10th. Both ulcers of the lip are healed, but the surface is raised and slightly discoloured: ulcer of tonsil a little more deep, in other respects unchanged.

Jan. 19th. On right anterior palatine arch a superficial ulceration exactly the same as that on left tonsil—the ulcer of this unchanged.

Jan. 31st. Ulcer of left tonsil has now a white surface, with soft white raised edges; ulcer of right arch unchanged; general health good. He is now in good flesh and colour.

Feb. 9th. No sensible effect from the medicine. P. 82. Complexion florid, general health excellent; ulcer of lip rather more deep, or edges more raised and white. Appearances of throat unaltered, but he feels less soreness in it. R. pil. hyd. gr. vj. Ext. cicutæ gr. ij. ft. pil. duæ H. S. sumend.

Feb. 23d. Copperish taste in mouth; gums slightly sore; ulcer of lip more extended, although in parts disposed to heal; ulcers of throat unaltered; all the ulcers touched with acid. acet. fort. P. 120 after walking.

March 9th. Mouth sore from the mercury; ulcers of the throat and lips much improved: appetite bad; headache: bowels confined; sleeps well.

March 16th. Mouth nearly well; one small ulcerated spot on each anterior arch; ulcer of lip has been subdivided into three small spots by the healing of interposed portions. Sumat pil. duas mane nocte.

March 23d. Weaker, and more easily thrown into perspiration; feels his throat more sore; ulceration of it and of lip as bad as ever; gums sore. Repet. pilulæ.

March 30th. Mouth still sore; throat and lip same as on 23d.
 April 20th. Ulcerations of lip and throat as bad as ever; they have lately been repeatedly touched with solut. arg. nitr. Sumat. acid nitr. dil. gutt. xvi. ter in die.

May 25th. Symptoms unaltered. Sumat. acid. nitr. dil. gutt. xxx. ter in die.

June 1st. Throat a little better; lip much better; appetite and strength good. Fumigentur ulcera quotidie c. rubri hyd. cinerei 3 ss.

June 26th. Since 22d has been fumigating daily with hyd. ciner. 3 j made up in a candle. Gums a good deal swollen, with their apices between the teeth in a sloughy state; mercurial fœtor of breath; feels himself weak; ulcer of lip healed, but has left a discolouration which marks its former site and extent. Ulceration of throat healed, but natural colour is not restored; spot on dorsum of tongue still remains naked and destitute of papillæ.

July 13th. Mouth smartly sore. P. 78. Thirst urgent, appetite indifferent, sleeps well, bowels costive. He is easily thrown into perspiration by exercise; lip and throat as on 26th June. Sumat. sulph. quinzæ gr. ij ter in die. Omit. hyd. ciner.

Aug. 17th. Tonsil with a superficial venereal ulceration. Within the last few days a blister appeared on the under lip; this spot now presents the character of the former disease in colour, but is not ulcerated. He has now also a superficial ulceration at the verge of the anus obviously venereal. He does not suffer pain from this when going to stool, but whenever he is warm either in bed or by exercise. P. 78. Lotio nigra ano applicanda.

Aug. 24th. Symptoms as on 17th. Has used the black wash in a very careless manner. Spot on lip rubbed with sulph. cupri, and he is directed to wash it three or four times a day with solut. sulph. cupri.

Sept. 21st. Spot on lip scarcely discoloured; ulceration of tonsil less deep; the integuments around the anus are healed wherever the lotion has been carefully applied, but a superficial ulceration still exists in the folds of the skin close to the orifice of the anus.

Oct. 19th. Left tonsil is still slightly ulcerated, with a yellow surface; on the inside of right cheek there is now a white spot. P. 90. General health good. Repet. solut. sulph. cupri.

Nov. 16th. Superficial white ulceration of both the anterior arches; also about the right dens sapientæ adjoining part of the left cheek. Repet. solutio sulph. cupri.

Nov. 23d. Symptoms as on 16th inst. Sumat. omni. nocte sulphureti hydrargyri rubri gr. v.

Dec. 14th. Throat much better; only one or two small white spots on the right anterior arch and around the right dens sapientæ. Sulphureti hydrargyri rubri gr. x. omni nocte.

Jan. 4th, 1835. No sensible effect from the pills. Throat nearly as before in appearance and in feeling. Hyd. calcinati gr. i. opii. gr. ss. omni. nocte.

Jan. 11th. Throat better in appearance; ulceration of gums not better; no sensible effect from the pills. *Repet. pilulæ.*

Jan. 20th. Mouth sufficiently affected; throat not better in appearance; ulceration of gums as before. *Omitt. pilulæ.*

From this time all mercurial treatment was discontinued, and he went to the country. He returned to me on the 22d of April, 1835, and informed me that an appearance of the ulceration of his throat has since repeatedly returned, but that he always removed it pretty soon by the application of a lotion of sulphas cupri. His general health is now excellent.

In the report of 27th December, 1833, it is stated that the ulcer on the left tonsil is of a dirty yellow colour. This might lead us to believe, that the white condition of the mucous membrane produced by mercury, employed for the cure of venereal symptoms, is nearly allied to the yellow ulceration which arises under similar circumstances. After the use of mercury continued with but little interruption for twelve months, we find on August 17th, 1834, "there is now a superficial ulceration at the verge of the anus, obviously of a syphilitic character." This I advert to, as it establishes the very intimate connection between certain syphilitic affections of the mouth and throat and the skin around the anus. After a perusal of the details of this case, I think we are justified in concluding, that this condition of the mucous membrane of the mouth and throat (though a sequela of syphilis when treated by mercury) is itself not to be cured by mercury: and yet mercury will, at the same time, cure any other truly venereal symptom which may exist along with it.

Alexander Hamilton, æt. ann. 40, of a healthy appearance, was admitted into 12 ward on March 10th, 1835. He complained only of the state of his mouth and throat. The inner surface of each lip was occupied by large patches of a white colour, which on a superficial view appeared to be ulcerated, but on closer inspection these patches were found to be raised, to be of a milk-white colour, and traversed by fissures in various directions. The right side of the tongue, the inside of the corresponding cheek, and the anterior surfaces of the soft palate and tonsils, were similarly affected. He had a small and slightly indurated cicatrix on the glans penis; but no other venereal symptom. His general health very good.

Eight months previous to his admission he contracted a gonorrhœa, and soon after the sore appeared on his penis. For cure of this ulcer he immediately took some pills, which produced salivation, but the sore did not get well until about five months ago, when it was healed while he was a patient in Mercer's Hospital. In one month after he had been discharged from the hospital, the ulcer broke out again; he then applied to an apothecary, who ordered him pills, four of which produced profuse salivation, and caused the sore to heal; but since that time his mouth has assumed the appearance above described. He was ordered a tepid bath and purging mixture, and then to take every night two pills consisting of pil. hyd. gr. v. c. pulv. Jacobi, gr. iii. and these pills he con-

tinued to take until 15th April. A very slight mercurial action was ultimately produced by these pills, but without any permanent improvement in the state of the mouth or throat. No doubt at times one part would seem to improve for a few days, but at the same time some other part appeared to be as much disimproved.

He was next ordered burnt alum, washes of chloride of soda, and a variety of topical applications; but none of them, except such as were possessed of some escharotic quality, appeared to make an impression. The sulphas cupri, rubbed on strongly, would often cause an evident improvement, but only for two or three days, after which these parts fell back into their former state.

At one time all the diseased parts of the mouth simultaneously put on an improved appearance, while all the throat seemed to grow worse, for the notes on April 11th say, there is a very evident amendment in the symptoms; the tongue has now its edges thin and natural in appearance, having now only two or three spots indented by the teeth. He himself says that he feels the tongue quite well; the lips are less swollen, and the white swollen mucous membrane is less raised; but he feels his throat more uneasy than usual, it has a good deal of the white coating, or superficial ulceration, on the anterior arches. Mouth is scarcely affected mercurially.

May 20th. Although his general health has continued in excellent order, yet his symptoms are nearly unchanged. Altogether we have not made any decided advances towards curing this man. I now was determined to try if it would yield to minute doses of mercury, and accordingly ordered R. hyd. cinerie gr. i. fiart. pilula ter in die sumenda.

This plan having failed after a full and fair trial, I wished to try the effects of change of air, and therefore I dismissed him from the hospital on 29th May, and desired him to attend as an out-patient, in order that different kinds of escharotics might be carefully employed. This plan was regularly and steadily employed; the result was a very gradual and slow improvement, the steps of which do not require or admit of verbal description. The argent. nitr. in solid, and saturated solutions of sulph. cupri, and sometimes the solid sulph. cupri, were the applications generally used.

July 19th, 1835. The throat was yesterday well rubbed with sulph. cupri, and this day it appears a good deal better.

July 26th. Throat is now all but well; at present there is only one small circular spot, not deeply white, not at all ulcerated, lying in the centre of a red patch which covers the front of the right side of the velum pendulum palati.

Aug. 4th. The ulcer of throat seems disposed to heal, but he now complains of tenderness of tarsal bones of the left foot, and also of pains of his shoulders and limbs. Sumat. olei. tereb. gutt. xxx. ter in die.

Aug. 8th. Throat is perfectly well; pains of shoulders and of limbs are also better, except that of the tarsus.

Aug. 17th. Pain of foot has been much relieved by a blister, but still some slight tenderness remains. Pain of shoulders en-

tirely removed; says he feels some uneasiness in his throat, but I cannot on the most close examination discover any cause for it.

Sept. 15. An ulcer in form of a fissure has appeared on the side of the tongue; no other appearance of disease in the mouth. Pain of instep had returned, but again removed by another blister.

By further perseverance in the use of mild caustics, this disease was finally removed.

This affection of the mouth and throat some may imagine is merely an effect of inflammatory condition of these parts left on the subsidence of that action. Were this the case, we should find it make its appearance immediately on the subsidence of the high mercurial action. But we will often meet with cases in which this symptom has not shown itself until long after the ptyalism had ceased. Of this the following is an instance.

Captain B— applied to me 7th July, 1835. Says he had a chancre in August, 1834, which was treated by pil. rhei. internally, and by black wash, the only external application. Under this treatment it was healed in the latter end of September. The chancre in a week or two opened again; he was then treated by Mr. Lawrence, of Brighton, who made him use mercurial friction twice a day. By this process his mouth was not made sore, nor was he much reduced in strength and flesh. He continued free from any symptoms of disease until the latter end of May, when he felt a soreness of his throat. He did not feel any uneasiness at the anus until three weeks ago. The arches of the palate are pretty generally affected with the white rugose state of the mucous membrane, in which a few slight fissures appear. At the anus is a small condyloma, with a very superficial ulceration or excoriation. He is much surprised to learn that these two symptoms are in any way connected, and he remarks that this disease ought to have first made its appearance at the anus, because, as a cavalry officer, he has so much riding exercise; but perhaps it seized first upon the throat because he was so much addicted to smoking.

CHAPTER VIII.

OF VENEREAL DISEASES OF THE MOUTH, &c.

Under this head we propose to consider all the venereal ulcers of the mouth and tongue, as well as of other parts liable to be secondarily affected.

The tongue is subject to two or three different forms of venereal affections, some without and some with ulceration. I have already mentioned the ulceration on the root of the tongue at the point of connection with the anterior palatine arch, and also that which is found about the central point of the base, on a range with the

termination of this arch. In addition to these we sometimes find the point, and sometimes the edge of the tongue, the seat of an ulcer, which is strictly a secondary venereal ulcer, and it is remarkable we seldom have more than one other secondary symptom accompanying it—perhaps only five or six spots of papular eruption, or a solitary venereal ulcer on one of the limbs or on some part of the body. This, like other forms of ulcers of the tongue, is sometimes attended with profuse ptyalism, and sometimes with scarcely any extraordinary flow of saliva.

The characters of this ulceration are not constant; in some cases we see the point of the tongue (when this is the seat of the disease) broad and truncated, the surface covered with a thin and rather a soft slough, the extremity appearing to the eye much swollen, and presenting to the touch a very considerable degree of hardness. In other instances of this species of ulcer, in which a similar degree of swelling and of hardness are present, yet the surface may exhibit merely an ulcerated and a somewhat foul appearance.

When the ulcer is seated on the side of this organ, we find it present appearances similar to those of the ulcer on the point, but seldom attended with an equal degree of swelling, although the hardness is not less. Occasionally, an enlarged lymphatic gland under the jaw attends the venereal ulcer of the tongue.

We find it a matter of much difficulty, to distinguish the venereal from the cancerous ulcer of the tongue: the surfaces of both are subject to vary materially at different times, and also either in the entire, or in parts. Both are attended with considerable hardness; but I think that the hardness in the cancerous form gives much more strongly the idea of a stony hardness. There is one symptom which, when present, strongly indicates the cancerous nature of the ulcer; and that is a slightly elevated narrow ring, of considerable hardness;—if this include an ulcer, with a surface so clean as at first view to resemble an ulcer which is about to assume a granulating state, then we may unequivocally declare it to be cancerous. However, it must be admitted that the surgeon is unable to decide from the appearances, especially if he overlook some other concealed venereal symptom. In all such cases the surgeon should give the patient the benefit or the chance of a slight ptyalism: if this be induced quickly, it cannot be prejudicial to the cancerous ulcer, and it will so speedily induce such a favourable change in that which is venereal, that every doubt must be removed by such a test. I have no doubt that every surgeon must have occasionally met with cases on the nature of which he could not pronounce, until he witnessed the improvement induced by the mercurial action. When a fissure is suspected to be caused by the sharp point of a tooth, we must have this cause removed; and then if the ulcer heal, we are certain of its real nature.

In a few cases we may find a venereal ulcer on some portion of the dorsum of the tongue, anterior to its base; the place of this ulcer having probably been determined by some accidental irritation of that part. Ulcers in this situation are generally of a circular

form, large as a fourpenny piece, and present pretty strongly the characters of a secondary venereal ulcer of the skin.

In some cases we see a long narrow stripe of ulcer on the under surface of the tongue; this is of a white colour, and, were it sunk below the level of the surrounding part, might be supposed to be formed by an exudation of lymph: this lies so far away from the edge of the tongue, that we see at once it cannot be mistaken for an ulceration caused by the pressure of the teeth.

The chronic, or as it is generally denominated scrofulous, ulceration of the throat, is found in some few cases to spread to the tongue; and, when once established there, is very apt to spread forward, by a very slow but rather destructive process of ulceration. In some of these cases the ulceration of the tongue is not a continuation of that of the throat, but exists independently of it. In general, however, that of the throat has nearly ceased at the time that this of the tongue is established.

These chronic ulcers of the tongue are to be distinguished from those that are venereal; which may be done by observing that the former are much less foul, but with still more certainty, by looking at the throat, and finding there those silvery cicatrices which invariably follow this peculiar form of chronic ulceration.

Before we dismiss the subject of venereal ulcers of the tongue, I would observe, that we occasionally meet with instances of superficial ulcerations of this organ, coming on after a course of mercury, for the cure of either primary or secondary symptoms, and which we should take care not to mistake for venereal ulcers. I know not by what characters of the ulcers themselves we could be enabled to decide this point; but I think we shall avoid falling into any mistake, if we refer to the history of the case; for those ulcers which are not venereal will be found to make their appearance in twelve or eighteen days from the time the mercury has been laid aside—indeed before we can be assured that the action of this medicine on the mouth has entirely ceased.

Let it not however be forgotten, that in some instances where salivation had been excited for the cure of either primary or secondary symptoms, the ulceration of the tongue, caused by the mercury, has not healed; and, in the space of a few weeks after the ptyalism has subsided, such ulceration has assumed all the characters of secondary venereal ulcers. I need not add, that such require another and more judicious course of mercury.

I have already alluded to that appearance on the dorsum of the tongue, in which patches of different sizes (but usually of a circular form) appear, as if deprived of papillæ; the surface perfectly smooth; these spots may be termed bald. Such are sometimes found along with other symptoms, purely and strongly syphilitic; and sometimes, as I have already mentioned, they attend that white condition of the mouth and throat which occasionally succeeds to a course of mercury employed for the cure of syphilis; but never, I believe, when employed for the cure of any other disease. So that in forming our judgment as to the necessity of mercury in

such cases, we must be decided by the nature of the accompanying symptoms rather than by any particular condition of these spots.

I have, in a few cases, known an ulcer on the side of the tongue arise merely from deranged digestion, and a vitiated state of the stomach; and yet so strongly resemble a venereal ulcer of this organ, that it might, by a hasty observer, be pronounced syphilitic. Such appearances I have seen, in a few individuals, repeatedly produced in a few hours by the use of vegetables, or of acids. In all such instances the absence of other syphilitic symptoms will prevent us from resorting to mercury; and, in a short time, the use of medicines calculated to improve digestion, and strengthen the stomach, will cause the ulcers to heal, and put an end to all doubt about the true nature of these ulcers.

Venereal fissures are occasionally met with on the edges of the tongue, and may run across the edge either in a straight line, or in an angular direction: the edges of these fissures are remarkably hard; and we almost constantly find the fissure surrounded by a superficial white blister, somewhat like an ulcer—these ulcerated spots seldom exceed in extent the surface of a split pea. As the edges of the tongue are subject to fissures from other causes—*ex. gr.*, from the irritation of the sharp point of a broken tooth—we shall sometimes be at a loss to decide upon them. If, however, we recollect that the venereal fissure is generally surrounded by the small superficial white ulcer, we shall acquire a confidence whenever we see the accompanying white ulcer.

Not unfrequently we find small circular excoriated spots on the hard palate; these, sometimes, are accompanied by other unequivocally venereal symptoms; and, in other cases, they appear in conjunction with the yellow or the white superficial ulceration of the mouth, consequent on a mercurial course.

The nature of the accompanying symptoms must decide whether or not we shall employ mercury in the treatment of each individual case.

Venereal Ulceration of the Gums.

The gums are sometimes, though not often, affected with venereal ulceration; this, if extensive, and allowed to remain long uncontrolled, may induce disease, and exfoliation of some of the alveoli, and the loss of one or more teeth. This ulceration in some patients assumes all the characters of a secondary venereal ulcer; while in others it is more of a pale white surface, with considerable redness, and some swelling of the adjoining gums. In this latter case we shall find the accompanying ulcers of the throat, or of other parts, marked by similar languid characters. It is a curious fact, that the ulcer of the gums is generally confined to the external, and that the inner gums remain unaffected until the disease shall have injured the interposed bone. We may see the alveoli laid bare, to some extent, by this disease; and yet the teeth remain firm and apparently unaffected.

When pyralism has been induced by a course of mercury, which

has proved insufficient for the cure of any venereal symptoms, we may find after the pyalism has ceased, and after the rest of the mouth has become completely well, that the patient complains of soreness of the outer gums belonging to the last molares. On examination, we discover ulceration of these gums; and, at the same time, ulceration of the cheeks opposite to these teeth; and these ulcers are strongly marked as secondary venereal ulcers in other parts. When we observe these appearances, after all the other ulcers of the mouth (occasioned by the mercury) had healed, and that these ulcers exhibit venereal characters, we do not hesitate to pronounce that they are venereal. Of course they are then to be treated on the same plan as other secondary venereal ulcers are treated.

We must take care not to mistake for a venereal ulceration of the gums, that ulcerated state of them which we sometimes find attendant on scrofulous thickening and ulceration of the upper lip, and much more frequently a concomitant of lupus of the nose or lip. A very little attention will enable us to discriminate; for here we observe that the ulcerated part assumes the appearance of a mass of fungous yet healthy granulations, terminated very suddenly by the natural membrane of the gums; this raised surface is not covered with pus, but looks rather as if the granulated surface did not secrete any fluid; nor is there any line of ulceration between the limits of this raised portion, and the adjoining sound membrane. In these cases, no doubt, we shall find the teeth more or less loosened.

Again, we sometimes find a considerable length of the gums affected with a swollen, soft, spongy condition, to the depth of one eighth of an inch from their edges. This soft, swollen part, has also a different colour from the rest of the gums; having a more highly red colour, with an orange tint pretty strongly marked. This state of the gums is not to be mistaken for venereal ulceration; it not unfrequently seems to have been produced by previous courses of mercury.

Ulcers of the Nose.

Ulcers of the *alæ nasi* sometimes commence in the angle between the nose and cheek, from a cluster of papular eruptions degenerating into an ulcer. Whenever this ulcer shows a tendency to phagedæna, or sloughing, it should be treated with some very active caustic. For although this has been at first withheld, lest it should produce a loss of substance, yet I am certain that a much greater destruction of parts will be caused as certainly, although rather more slowly, by the progress of the disease.

I am not in possession of any distinctive characters which would enable us to pronounce an ulcer in the cavity of the nostril to be a venereal ulcer. The symptoms of what is called scrofulous *ozæna* correspond very much with those of the venereal *ozæna*. No doubt we often find the scrofulous *ozæna* has been preceded by scrofulous sore throat, which has ended in the formation of

those tense and silvery cicatrices already alluded to, and this alone will sometimes serve to distinguish them.

But let us not mistake for a venereal affection, appearances which are often met with in some who have never been exposed to venereal infection; I allude to those instances of ulceration of the nose, in which we discover in the septum nasi, about a quarter of an inch from its anterior extremity, an opening through the septum; this is uniformly, I believe, of a circular form, is as large as the surface of a split pea, and has a slight degree of ulceration on its edges. This state of the nose is not unfrequently established before the patient is aware of its existence, so very trifling is the uneasiness which it causes either in its formation, or when fully formed. And what is equally remarkable is, that it will be found for years to remain in precisely the same state, at least I have not met with the slightest alteration in any of those cases which I have watched, and I have had opportunities of observing some few for eight or ten years.

We must then hesitate to pronounce an ozæna to be venereal, unless we find it existing along with some other decidedly venereal symptoms; and that we can find its history interwoven with that of other secondary symptoms. It requires a good deal of experience and close observation, to enable us to distinguish between that which is termed scrofulous, and the venereal—although it is not, I believe, possible to describe by words the distinguishing marks.

Venereal Iritis.

On the subject of venereal iritis I have very little to offer. I shall only say that this is a symptom which cannot be charged to the account of mercury; for it occurs in cases which were treated by the non-mercurial plan only. I think that in the treatment of it we should not use mercury in such a manner as may suddenly plunge the patient into a profuse salivation; for in general the disease is not so acute but that it will admit of some delay, and will allow a sufficient time to produce this effect of mercury according to the ordinary mode of exhibiting it. The great disadvantage of a sudden and profuse salivation is, that although it arrests and cures the iritis, it renders all the other symptoms more slow and much more difficult of cure.

When iritis takes place at a time when the system is beginning to throw off a smart salivation, perhaps while the mouth is still smartly sore, although the flow of saliva has begun to decline, or when it takes place in a case where the mercury though used in large doses is not acting in a kindly manner on the system, I say in either of these instances we cannot attempt to cure the affection of the eye by mercury. And again, when we have used mercury for the cure of the iritis, and have induced ptyalism thereby, but without affecting much improvement in the state of the eye, we must then have recourse to other means of relief. In these

cases we sometimes succeed almost beyond our expectation, sometimes by giving bark largely. Sulphate of quinine is the remedy which I have been most frequently in the habit of employing, and generally with the happiest effect. I have also seen oleum terebinthinæ taken internally, as also colchicum, apparently with much benefit.

We not unfrequently see in some of those who are afflicted with secondary syphilis, a venereal ulcer on the edge of the eyelid, and it is remarkable that this disease appears generally in cases where many other symptoms of this disease exist along with it. This ulcer of the eyelid, on a superficial view, appears to occupy only a very small portion of the edge of the eyelid; but on turning out the lid we see it passing down on the conjunctiva palpebrarum to half the depth of the eyelid, presenting rather a raised surface towards the globe of the eye. The deformity and injury to the globe of the eye, which such ulceration may produce if allowed to extend itself, loudly call for our active interference with local treatment; and accordingly we should employ caustics of such strength as the condition of the ulcer may seem to require, in order that we may as speedily as possible bring it into the condition of a granulating ulcer. I have seen one case in which this kind of ulcer took a very unfavourable turn, it spread along the conjunctiva palpebrarum, as far as the globe of the eye, seized on it, and completely destroyed this organ.

The lachrymal sac and ducts not unfrequently suffer when venereal ulceration has seized upon the nostril, and that, in some cases, to such an extent that fistula lachrymalis is the consequence. It is unnecessary to say that we cannot undertake any thing for the relief of the lachrymal passages until the disease of the nose be cured; and I may add that when this has been accomplished, we generally find that there is no occasion for our interference, for the disease of these passages will subside in proportion as the ulceration of the nose advances to healing, and the former will be cured even before the latter is perfectly healed.

Secondary Venereal Ulcers.

Secondary venereal ulcers, which supervene on the eruption, generally assume a circular form. When the scab is first removed, the ulcerated surface is uneven, foul, and yellow; in its progress towards healing we remark that it begins to cleanse first in the centre—then granulations arise in that situation, these extend towards the circumference where the skin forms a deep edge, between which and the granulations is a ring of the same yellow ulceration as appeared when first the surface of the ulcer was uncovered. In proportion as the ulcer proceeds the granulations encroach on this yellow ring, until at length they reach the edge of the ulcer. The central granulations to a large extent will have actually cicatrised before the entire surface of the ulcer is cleaned and healthy.

These ulcers are also remarkable for the strong tendency which

the central granulations have to assume a fungoid character: so that, unless particular care be taken to prevent it, they will leave, when healed, a very high and prominent cicatrix. The ulcers also often heal from one side only, so as to resemble a kidney bean or a horse-shoe.

If a patient be afflicted with a number of these ulcers, we may observe that many of them may be induced to heal by applications of rather a mild kind, while two or three will remain unhealed. This fact might lead us to suppose that these ulcers were but little under the influence of the system. Yet again under the most mild applications all will sometimes simultaneously and quickly heal, when the system has been brought under the sanatory action of mercury, and this would lead us to suppose that all these ulcers were very much under the influence of the system.

When a venereal ulcer has been healed before the disease has been eradicated from the system, it will be observed to break out again, either by a number of pustules forming in a ring on the borders of the cicatrix, or by a pustule, covered with a scab, appearing on the edge of the cicatrix, this scab being rubbed or falling off, the fresh ulceration is established.

However numerous or extensive venereal ulcers may be, and however long they may have existed, whatever local or constitutional treatment they may have undergone, still I think we always find in one or more of them some appearance indicative of their nature and origin; this appearance is not such as would singly induce a surgeon to pronounce them venereal, but certainly is sufficiently strong to make him enquire into the history of the case, and try whether he could trace them up to a venereal origin. In forming an opinion on this difficult and very important point, he ought to be influenced more by the present appearances than by the consideration that mercury had been employed, and perhaps repeatedly, without effecting their cure. The difficulty of getting mercury to act favourably on some individuals, the judgment required to employ this medicine at a fit time, and to suit the doses and action to the existing state of the patient's health, and to the peculiarities of his constitution, all these considerations will weigh with him, and incline him to suspect that mercury had not had a fair trial, if the venereal aspect of any of the ulcers favour the opinion that there is (as the phrase goes) something venereal in them.

Although I have said that the cicatrix of a secondary venereal ulcer often opens again either by a ring of pustules forming around its border, or by a pustule and scab rising in the centre, and each of these degenerating into ulcers, still I do not mean to say that this is the only manner in which a second or third crop of these ulcers appears. For not unfrequently a tubercle of rather a large size forms in the skin and proceeds to ulceration, many such ulcers exhibiting in their cavity a slough which seems to extend to some short distance under the skin. These ulcers continue forming successive crops, even for years, if the disease be but partially cured, whether by imperfect courses of mercury, by sarsaparilla, or by

other reputed anti-venereal medicines. In illustration of these remarks I shall adduce the following out of many similar cases:—

Mr. P. contracted the venereal disease three years ago. The secondary symptoms were, in the first place, a rash; next, a sore throat; then tubercles of rather a large size, some of which went on to ulcerate, and became foul ulcers; and lastly, swelling and induration of the right testicle. For these symptoms he was treated in June and July, 1833, by calomel, which he used without caution, exposing himself to the weather, and living sometimes very freely, and always rather full. By this medicine a very smart mercurial dysentery was produced, with slight affection of the mouth. At this time all the ulcers healed, and for one month remained well. At the end of the month the ulcers began to break out afresh. At present there are, near the upper end of the right fibula, two small ulcers, of rather a healthy appearance, one on the dorsum of the foot, with considerable extent of surrounding inflammation with a foul surface, a shred, apparently of ligamentous texture in a state of sloughing, being extended across it. Another ulcer in a foul state, but not larger than a sixpenny piece, is seen on the calf of the left leg; swelling and hardness of the testis remains. There are four or five small ulcers on arms and trunk. He is not at all emaciated, nor has he a sickly appearance. Such is his state now on the commencement of a mercurial course to be used under confinement.—Nov. 2d, 1833. R. ung. hyd. fort. ʒss. divide in chartas sex. Utatur una omni mane. Sumat mane nocteque pil. hyd. gr. v.

Nov. 6th. Two of the slighter ulcers are disposed to heal; the more severe ones are improved; mouth is not sore, but he says that he feels it soon will be so; has used only two papers of the ointment. Pergat.

Nov. 9th. Ulcer on dorsum pedis is more painful, edge of the skin overhanging the ulcerated surface; this now presents a good deal of florid granulation, the surrounding inflammation not so much extended, but the colour of it more intensely high and brighter; ulcer on the calf of the leg unaltered in its edges; surface more glazed and smooth, with but little of surrounding hardness; mouth is becoming more sore. Repet. pilulæ ut 2d inst. Utantur ung. hyd. fort. ðiv. in die.

Nov. 15th. Has had mercurial tenesmus for last three days, and mouth is now pretty smartly affected; ulcers are all cleaner and have less of surrounding hardness, but still their improvement appears to be rather slow. Omitt. ungt. et pilulæ.

Nov. 18th. Ulcers improving, though slowly; I do not think his mouth sufficiently sore. Ung. hyd. fort. ʒss. bis in die. Pil. hyd. gr. v. ter in die.

Nov. 22d. He has rubbed (by mistake) a dram of ointment twice a day until yesterday, when he used only one dram and one pill; mouth is now smartly sore, with a strong tendency to pyalism. P. barely 90; app. good; sleeps well. Ulcer of dorsum pedis considerably better; that on calf of leg not so much improved; all

the other ulcers vastly better. Utatur ung. hyd. fort. 3ss. in die et pil. hyd. gr. v. omni nocte.

Nov. 28th. Mouth very sore; pretty deep ulcers on each cheek opposite the dentes sapientiæ; appetite failed him yesterday and this day; gets five hours of uninterrupted sleep; pulse 106 and small; the ulcers are all but healed; that on dors. pedis is now quite free from surrounding redness and swelling; hardness of testis quite removed. Omitt. medicamenta.

Dec. 1st. All the ulcers are cicatrised; the old cicatrices of former ulcers have assumed a dark copper colour, and are sunk below the level of the skin, with a sharp well defined edge; mouth is less sore; appetite good; no thirst; sleeps well. Ung. hyd. fort. 3ss. bis in die. Pil. hyd. gr. v. omni nocte.

Dec. 7th. Mouth less sore; some thirst. Repet. med. ut 1st inst.

Dec. 11th. Mouth more affected; some thirst; appetite good. Rep. ungt. semel in die. Omitt. pil.

Dec. 14th. Mouth very satisfactorily sore, and with more ptyalism than ever. Omitt. med.

Dec. 21st. Mouth nearly well; symptoms all removed. I now advised him to take pills of hyd. cor. sub. one eighth of a grain three times a day.

Jan. 13th, 1834. Has taken the pills for eight days; they purged him, especially when he drank strong porter. I shall only add that he has since enjoyed most excellent health, and that he has not had any appearance of even a suspicious symptom.

Here is a case of venereal disease, continuing during a period of three years, in spite of various attempts to cure it whenever it made a fresh attack. The treatment was not on every occasion dependent on the powers of mercurial medicines; for in August, when he was affected with nearly the same symptoms as he laboured under in November, 1833, he began a course of sarsaparilla, and used it with great perseverance and in large quantities, having taken it during August, September, and part of October.

Why the sarsaparilla failed I shall not pretend to determine; but I am fully convinced that the failure of the different mercurial courses was caused by inattention and irregularities on the part of the patient, and misjudgment and mistaken indulgence on the part of the surgeon, who did not insist on the course being conducted under confinement. Let us now attend to the effects of the mercurial course last employed, and which proved a cure for this tedious disease. We find that the report on the 7th day of the treatment is rather unfavourable, for it describes the ulcer on the dorsum pedis decidedly worse, and that on the calf of the leg as rather worse. We find, too, that on the 15th November, the thirteenth day of the treatment, an improvement is admitted, but is represented as slow, although the action of mercury on the system for the three last days had been manifested by the mercurial tenesmus.

Now had these occurrences taken place with a practitioner whose mind had been strongly imbued with fears of the mischievous effects

of mercury, he probably would have laid aside the mercury altogether on the seventh day of the treatment, regretting that he had ever been tempted to use mercury, or lamenting that he had not begun to use it more sparingly after the fourth day (Nov. 6th), when it appeared to be agreeing so well with the different symptoms. Is it not generally the case, about the seventh or eighth day, when the mercury ordinarily begins to act sensibly on the system, that we see a change apparently for the worse in the condition of the ulcers; *this* continues for two or three days longer, viz: until the mercurial action comes to be fully established, and then we find a decided improvement take place in the ulcers? Let us not therefore determine upon laying aside the use of mercury in cases of venereal ulcers, until we shall have seen what effect this medicine shall have when it has come into full action.

Now I suspect that this timidity in employing mercury, this hurry to lay it aside upon the first appearance of any thing like an unfavourable change, has been the reason why it has been so much disused in the practice of many surgeons. Whereas the true rule by which we should guide our practice is this: to desist from the further use of mercury in the *advanced* stage of a mercurial course, as soon as we perceive a decided change for the worse in the ulcers (or rather symptoms). Let us not confound together the bad changes which take place in the onset of mercurial treatment before this medicine has taken full hold of the system, with those bad changes which we occasionally witness in the advanced stage of the course, when the mercury has for some time had full power over the system.

On the seventh day of the treatment, I doubled the dose of the ointment, knowing well that my patient's constitution was one which yielded reluctantly to the power of mercury.

It must strike every reader that in this case the mercury, after ptyalism was produced, was intermitted for much shorter periods than in ordinary cases. This was rendered necessary by the extraordinary quickness with which the action of the mercury subsided in this patient. We know that in ordinary cases, when ptyalism is excited, the action of the mercury continues almost unabated from eight to twelve days. Whereas, here the mercury was at no period omitted for a longer period than four days; and indeed, during the whole course mercury was employed in larger or smaller quantities, except for the one period of three and for another of four days. I was forced to this by the peculiarity of the patient's constitution, and should not have done so from any desire to accumulate mercury.

From the reports of the 22d and 28th of November, we can form a pretty correct notion of the little disturbance occasioned by a very smart action of mercury. On the first of these days "pulse barely 90, appetite good, sleeps well." On 28th, "pulse 106, and small; appetite failed him yesterday, and this day. Gets five hours of uninterrupted sleep." Surely these light disturbances of those few functions are not calculated to make a lasting injurious impression on the future general health; particularly when we find, on

December 1st, that the "appetite is good, he has no thirst, he sleeps well."

It must be a very crazy system, indeed, that could not bear these slight disturbances for so short a period with impunity.

Thus, in a period of forty-two days, was this gentleman delivered from a disease which had materially interrupted his pursuits and his enjoyments, for a period of three years. If I be asked, why I did not at first employ this treatment, I shall find my apology in the impossibility of persuading young men nowadays to submit to a vigorous use of mercury, under confinement, when they see so many of their acquaintances treated by very mild doses, and very slight action of mercury, used while the patient is debarred of very few of the ordinary amusements and indulgences of life. Besides, so much has been written, within the last twenty years, in praise of a non-mercurial treatment, and so much in condemnation of mercury, or at least of what has been termed its abuse, that it is scarcely reasonable to expect that patients will submit to the more rigorous treatment, until they have first had sad experience of the inefficacy of milder measures. Mercury, alone, accomplished every thing in this case, with the exception of a little laudanum to check the mercurial dysentery; for the ulcers were dressed with spermaceti ointment only.

I shall now only add that this gentleman has continued free from any relapse, or return of any symptoms. In two years after this cure he had occasion to undergo a course of mercury for a primary sore; the cure was effected in the ordinary time with little more than the ordinary quantity of mercury; nor did any untoward circumstance impede the progress of the cure.

CHAPTER IX.

VENEREAL ERUPTIONS, NODES, AND DISEASES OF THE TESTICLE.

Modern writers on the venereal disease have bestowed much pains in observing and arranging, in a nosological order, the varieties of cutaneous eruptions which form a part of secondary syphilis. Their labours have been attended with much advantage in the treatment of some of these affections, as we shall presently remark; and I should think the subject might still deserve a continuance of that zeal, and minute research, which some have bestowed upon it, were I convinced that each form of these eruptions constituted a distinct species in the disease. I fear, however, that any superstructure raised upon this hypothesis will not stand the test of time, as I do not believe that these eruptions can be considered as characteristic of distinct and different forms of syphilis.

My reasons for dissenting from others upon this point are the

following:—First, I have not unfrequently observed varieties of eruption exist together in the same individual; for example, I have seen small venereal lichen on the face, while a large form of papular eruption occupied the trunk and the extremities; sometimes, also, I have found spots of a pustular character scattered through a general crop of the papular eruptions. Secondly, I have noticed, as a very frequent occurrence, that when the first eruption has been removed, either by the use of mercury, or by other means, that the second crop has proved of a different kind; thus, when the first eruption was of that small pimply kind which resembles measles, it has been succeeded by a papular eruption, and this again by a pustular crop. And, thirdly, by injudicious treatment; for example, by the excessive use of mercury in bad habits, any one other form of eruption may be made to degenerate into one which is most obstinate and severe, namely, that of rupia.

I must declare, that, after long and careful observation, I have not been able to trace particular forms of eruption to particular forms of primary ulcers.

It is hardly necessary for me to repeat that venereal eruptions, like other secondary symptoms, are often ushered in by a smart degree of fever, and that we almost uniformly observe that the fever which precedes the first eruption runs higher than that which ushers in any subsequent attack. Sometimes the eruption is preceded by lassitude and shifting pains of the limbs, which become more severe in the evenings, and during the early parts of the night; while in a few cases the premonitory symptoms, if any, are so slight as not to attract the notice of the patient. By close and repeated examinations, we shall find that some spots of the eruption appear to decline, and that fresh spots come out during the first three or four weeks; after this, probably about the sixth week, the general eruption declines so very remarkably as to lead the patient to indulge a sanguine hope that he is about to be relieved from it altogether. But whatever advances it may make towards a cure, these never go so far as to leave the skin free from stains of a pretty deep hue. After a period of four or six weeks of apparent amendment, the patient's hopes will again be damped by the appearance of a fresh crop of eruption, and probably one of a different character, which is generally preceded by an eruptive fever, more or less severe. Not unfrequently, a peculiar pale sickly aspect, loss of appetite and of strength, night sweats, and a pain in some one joint or limb, affect the patient for one or two weeks previously to the second or third crop of eruptions.

In some cases the eruption is very general, occupying almost every point of the skin; in other cases it is very partial, showing itself, for instance, only about the ankle and tendo Achillis. I think we may expect to find, that the eruption which is spread over a wide surface, however thickly it may be set, will prove more tractable than that eruption which is confined to a small portion of the limbs, and which may not exceed the number of twenty or thirty spots.

In long-protracted and obstinate cases of syphilis, confined to the first order of parts, we frequently see this partial eruption as one of the last lingering symptoms; I cannot pretend to say for what length of time any of those eruptions might continue to preserve its identity through successive crops, nor for what length of time any one of them might continue to infest the skin; but I have seen one instance where a single patch of papular eruption, accompanied by other suspicious symptoms, yielded kindly to a course of mercury, at the end of four years from the appearance of the original chancre.

If the practitioner pay close attention to his case, he cannot (and he ought not) often be guilty of error in discriminating venereal from other eruptions; yet such mistakes have occasionally occurred. Thus I have known a medical practitioner treat for measles a young man to whom he was called, while labouring under the fever which ushered in that very small red venereal rash which so much resembles the eruption of measles; and this resemblance was strengthened by the suffused condition of the eyes, which ordinarily accompanies this form of venereal eruption. A still more serious mistake I have known to have been made by an eminent physician, who mistook for papular venereal eruption, those papulæ which are often seen on the shoulders and backs of young persons with coarse skins. In this case, the subject was a young man with incipient hectic—this the doctor considered as springing from venereal infection; and having subjected the patient to a pretty free use of mercury, he saw him quickly sink, overwhelmed by the rapid and accelerated advance of pulmonary hectic.

If, without trusting to a vain conceit of our own skill, by assuming that we can know by sight all the symptoms of the venereal disease, we merely take the trouble of enquiring carefully into the history of each case, we shall seldom commit any very serious error.

One and the same line of treatment will not prove equally successful in all the various forms of syphilitic eruptions. Experience proves to us that the scaly eruption, the copper-coloured blotch, and the papular eruption, are those which yield most readily, and are most certainly and perfectly cured by the action of mercury, given in the ordinary doses. But the pustular eruption, and especially when of a larger size than ordinary, requires a very particular treatment. No one fact can be more clearly established than this:—that if mercury be used too largely in cases of pustular eruption, the latter will quickly degenerate into venereal ecthyma or rupia, or spreading venereal ulcers. This form of eruption is one of those venereal affections which, while it is materially aggravated by large doses of mercury, can be certainly and safely cured by small doses, as I shall endeavour to show in the chapter on minute doses of mercury. If we watch with care the progress of the pustular eruption, we must be struck with the strong disposition which it betrays of running into, or of being converted into, ulcers. Sometimes the pustules spreading widely,

and still keeping superficial, form ulcers covered with thin soft yellowish crusts; while in other cases, each pustule, without enlarging much, forms into a deep ulcer covered with a brown scab, which is depressed below the level of the skin. Now, in either of these cases, mercury administered in very minute doses, and with extreme caution, will effect a cure, and that, too, in a very short time.

It would seem as if the pustular ulcer was closely allied to the rupia; for I have in some few instances seen, on the same person, a soft white flat scab on the spots on the face, and on the bald part of the scalp; while on the shoulders only scabs of rupia were to be seen.

The scabs and ulcers of rupia appear to be very little under the influence of mercury. I have seen this medicine administered in cases of this affection, to patients of pretty vigorous habits; and although it acted in a most kindly manner, and produced a full and healthy ptialism, yet it had not any effect in causing the scabs of rupia to dry up, and fall off; nor did it induce, in those ulcers which had been exposed by the previous removal of the crusts, any disposition to heal—the only change induced by it on these, was to convert them into ulcers; which, though florid, presented one uniform smooth surface, sunk below the level of the skin, and totally devoid of granulations, which proved very slow and difficult to heal.

But the administration of mercury, to patients afflicted with rupia, is worse than useless in all instances where the patient is naturally delicate, or has been much reduced and lowered by the previous disease; for in all such it proves almost invariably fatal, by increasing the weakness, and generally by inducing an uncontrollable diarrhœa. It was only in a few very robust men that it could be said not to have proved highly dangerous or fatal.

In treating cases of papular eruption, we shall often observe fresh spots of eruption coming out during the early exhibition of mercury. But as soon as the mercury has fully taken possession of the system, fresh spots cease to appear, and the general crop becomes more faint in colour—so far we may rest assured that all is doing well; but if, after this, we observe some fresh spots come out, and some few spots of the original eruption appear covered with a soft scab, around the edge of which a ring of pus appears, then we have most positive proof that the mercurial action has been carried too high; and should we persist in the same line of treatment, using mercury in the same doses, we shall meet with sad disappointment. For the results of such practice will be, that these scabs will each of them degenerate into ecthyma, or rupia; and that a considerable number of fresh spots of eruption will come out, each of which will be very speedily covered with a scab, and degenerate into rupia. We shall have then substituted for a papular eruption, which is a comparatively mild form of eruption, a very severe one—viz., ecthyma, or one which is most unmanageable, viz., rupia. Nor does the mischief end here; for as soon as

the new form of disease is established, we find that the health breaks down, a sharp degree of fever (of the type of hectic) sets in; and this, in no great length of time, is followed by diffused pains of the limbs, and occasionally by swellings of the small bones and small joints of the tarsus and metatarsus, or carpus and metacarpus. But the papular is not the only form of venereal eruption which may be made to degenerate in this manner; I have seen cases of scaly eruption converted into rupia, by the injudicious use of mercury. Let it, then, be a rule of practice to desist from mercury, or to reduce the doses immediately upon perceiving the commencement of such a change; and let us most anxiously examine the eruption frequently, that we may be enabled to discover the first approach of such a change. There is also this additional motive to induce us to watch the changes in the eruption, viz., that the general health does not begin to suffer until the ecthyma has been established; and consequently we cannot derive any indication from the constitutional symptoms, which would enable us to resist those changes in their commencement; and when the fever has set in, we have to contend with deranged symptoms, and with broken down health, and an enfeebled system. Should we be so careless as to overlook this change in the eruption, we shall, by our injudicious practice, convert a very mild form of eruption, unattended by any fever, or, at most, by one of a very mild and manageable form, into the most obstinate form of eruption, accompanied by a high degree of debilitating fever, and presenting in their combination a disease very tedious, and most difficult to manage. We shall recur to this subject when speaking of the treatment of rupia.

There is one sequence of venereal eruptions well deserving of our most anxious study—it is this: a patient whom we imagine has been perfectly cured, by a mercurial course, of some one form of eruption (ex. gr. the scaly or papular), may, in the course of eight or ten months afterwards, apply to us for advice under the following circumstances:—his general appearance may be that of perfectly good health, but he may have a very few spots of eruption; these may be scattered over different parts of the limbs; the entire number may not exceed a dozen; two or three may be found on the fingers of one hand, or on its palm or dorsal surface; perhaps two or three more on the opposite wrist, and two or three in the neighbourhood of the knee or ankle. These are found of the same character in every patient, whatever may have been that of the original eruption; each spot is of a coppery hue, is elevated above the surrounding skin, and is of a horny consistence, or rather of the firmness of an ordinary corn on the toes. Sometimes in the palm of the hand is seen a copper-coloured ring, pale in the centre, with a hard red raised margin, about a quarter of an inch broad. A most important point for our consideration in this case, is to decide whether such symptoms are to be considered as true venereal symptoms; whether the patient should be considered as still labouring under syphilis; and whether the offspring of such a

person, whether male or female, would be likely to be infected. Such cases of this peculiar form of eruption as I have had an opportunity of watching for any length of time, were either on females too old to have children, or on young men who had as yet remained in a state of celibacy; so that my experience does not enable me to offer any opinion on this subject.

Let not this form of eruption be confounded with that marbling of the surface, or with those broad distinct spots which, as a second and third crop, appear on the trunk; while from eight to twenty such spots appear in the skin of the palms of the hand—for this latter eruption is generally accompanied by pretty extensive ulcerations of the edges of the tongue, and yields readily to the influence of mercury.

I am at a loss to know what kind of treatment is best suited to such cases. I have tried mercury internally, in larger and smaller doses, and pushed it even to ptyalism. These spots have quickly disappeared when the patient became salivated; but even a protracted ptyalism has not prevented them from recurring. They have also disappeared in cases where the mercury was not producing any sensible effect on the system. I am disposed to think that I have seen more benefit, in such cases, from hydrarg. calcinatus, than from any other preparation of mercury; but I am ready to confess that I doubt whether in any case my plan of treatment was really useful. Indeed, I shall even say that I doubt whether such cases are not cured as effectually, and as well, by the unaided powers of the system, as when treated by any kind of medicine. Sarsaparilla was as little successful as mercury, in effecting their removal. I have had opportunities of watching some few of these cases for years together, and I found that this symptom recurred occasionally for three years after the supposed cure of the original eruption.

Veneréal Nodes.

Nodes arise only in the later stages of syphilis; the disease may then be said to attack those structures which Mr. Hunter calls "*second in order.*" Such parts of the bones as are most thinly covered, and are possessed of the most hard and close texture, are the seats in which this symptom, when purely veneréal, makes its first appearance. No doubt we frequently meet with nodes on the soft cancellated ends of bones, and on the small bones of the tarsus and metatarsus, carpus and metacarpus; but we shall generally find that nodes occur in these latter situations in patients who have employed more than one unavailing course of mercury, the veneréal disease being still unsubdued, although much altered by the treatment, and by the attending deterioration of the general health.

A veneréal node sometimes forms without much pain, not more perhaps than what directs the patient's attention to its seat; but in other cases it is ushered in by severe pain. In some instances, I have observed the tumour to be, for a few days, soft and very

painful; then it became firm, and at the same time almost totally free from pain. Those nodes which are solid at their origin, indeed, I might say all nodes, may, in course of time, proceed to suppuration; but this is generally a very slow process, and takes place only in nodes of long standing.

A node once formed, will often remain for months together apparently unchanged; no increase of skin, no discoloration of integuments, no feel of fluctuation discoverable. In other cases, however, a node will slowly undergo the process of chronic suppuration; this I have observed to have occurred more frequently in nodes on the bones of the cranium than in other situations. The formation of the pus does not bring with it any mitigation of the pain, if the node had been previously painful. But in many such, the node had ceased to be painful either long before or immediately on the commencement of this suppurative process.

When the bone has been exposed by art, or by the natural process of ulceration, we see it in some cases exfoliate by a pretty thick plate; in which case the patient has to submit to a very protracted ulceration of the integuments. In other instances, the denuded bone is soon perforated with numerous small holes, through which healthy red granulations arise, and at length, by their increasing numbers, cover the entire surface from our view, and in a short time proceed to cicatrisation; thus effecting a cure without our being able to discover any exfoliated bit of bone. Yet that the surface of the bone has been removed, we are afterwards assured, by seeing the depressed state of the integuments, and feeling the roughness of the surface, which ever after remains.

The bones of adults are subject to some diseases which simulate venereal nodes. One of these is periostitis. I shall not here attempt to describe the local conditions by which we may distinguish the one from the other, because I think this can only be done with certainty and safety by referring to the previous history of the case, and by a close investigation and enquiry for other accompanying venereal symptoms.

When examining a case of this disease, we should most carefully distinguish it from what I would call a "general nodose affection of the bones;" because mercury, which effectually cures the venereal node, exasperates to an intolerable degree this general condition or diathesis. The local condition of the parts can assist us, but in a slight degree; however, I think we may say that a greater number of the long bones are at once engaged in this general nodose disease than we ever meet with in pure syphilis. Again, the form of the swelling differs; for in the venereal node it assumes a rounded figure, whereas in the other disease the tumour assumes a more elongated form. It occupies, for instance, such a length of the anterior surface of the tibia as to give to the bone some resemblance to one which is curved by rickets. Both these bony tumours are attended with severe pain, and in both also this is aggravated at night, especially when the patient becomes warm in bed. This nodose disease, in general, attacks those who have passed the age

of puberty, although I have seen a few cases in which it attacked children of both sexes, at the age of ten or eleven years, the subjects being, in every other respect, to all appearance perfectly healthy.

We never can venture to form an opinion as to the real nature of a node until we shall have made the most minute enquiry into the history of the case, and searched most carefully for any other symptom of syphilis; for the accompanying venereal symptoms are often so trifling, or so obscure, as to be unknown to, or unnoticed by, the patient himself.

The condition and seat of a node afford us some criterion by which we can judge whether it be easily curable or not, and to a certain degree indicate the appropriate line of treatment. The node in the centre, or in the hard part of the bone, will be found much more easily treated and cured than one on the cancellated structure. The former node will bear, and it also requires, pretty active and full doses of mercury for its cure, while that on the cancellated structure of the bone will require the mercury to be used in moderate doses, administered with much judgment. Very many years ago I heard a most intelligent physician declare that nodes on the bones of the hands or feet were of all nodes the most difficult to cure; a long-continued observation has proved to me the justness of this remark.

In the treatment of pure venereal nodes, I believe we may entrust the final cure to the operation of mercury; but until the mercury is brought to act upon the system, we must use our best endeavours to mitigate the sufferings of the patient; for this purpose, I know not of any remedy more effectual than blistering the part, allowing it to heal, and blistering it again as quickly as we can; indeed, the blister sometimes acts like a charm in such cases. Every surgeon must have met with cases of pure nodes, which could not be removed; by the mercurial course and blistering they were relieved of all pain, but the swelling remained permanent. Some have proposed the early opening of the tumour, and evacuating all the contained fluid. To this proposal I would object; that in some cases this practice is followed by painful suppuration, and by very copious discharge, and not unfrequently by caries and tedious exfoliation of the bone. It seems to me preferable, in all cases, to try the local effects of blistering, and the constitutional influence of mercury; and by means of these, endeavour to avert suppuration and ulceration. This rule should be most strictly adhered to in the case of nodes on the forehead, or in any exposed part of the body; for when a node has been of long standing, we often find that a sort of chronic suppuration is established, the integuments become thin, and sometimes red; at other times, they are reduced to the utmost degree of thinness, and yet may retain the natural colour, so that the surgeon is actually tempted to give vent to the fluid by the puncture of the lancet. Yet if he will but resist the temptation which the very thin state of the skin offers to him to open it, and will still apply repeated blisters, he will have no reason

to lament his forbearance. For as soon as the mercury comes to act favourably on the system, he will perceive that the fluid begins to be absorbed, and that this process will finally be terminated by the adhesion of the skin to the surface of the bone. From the depressed position of the skin, and the sunken unequal surface which the bone presents to the touch, after the node is cured, we are convinced that an absorption of the bone has gone on to some depth. Now if we had adopted a different practice—if we had opened the tumour by even a very small puncture—the result would, most probably, have been an unhealthy tedious suppuration, perhaps also an exfoliation of bone, and certainly a very unseemly depressed cicatrix.

With respect to the constitutional treatment of nodes on the small bones, or on the spongy parts of long bones, I shall only remark, that in general, when they appear, the system is in a state which will be injured by large doses of mercury, and that it requires sound judgment and nice discrimination to employ this medicine in such a manner as to remove the disease; the most dangerous error which we can commit in such cases is to administer it too largely: we are not to omit the use of other auxiliary means; in the selection of these, we must, of course, be determined by the existing circumstances of each case.

It may not be amiss to mention the extraordinary influence which a node on the femur sometimes has upon the condition of the entire limb. The node on this bone is generally seated in its lower third or lower half, and on its anterior surface. Of course it is scarcely perceptible by the eye, but is readily detected by carrying the hand along the front of the bone, and by squeezing it as we descend. Should the disease have existed for any length of time, we shall, upon close examination, discover that this limb, through its entire length, is less full than the other which is free from disease; and if we compare the nates, we shall be led to suspect that there is *morbus coxæ*, so close is the resemblance of the buttock of the affected side to the condition in which we find it in that disease; indeed, there is only wanting the painful feeling in the groin to complete the picture; as not only is the limb more wasted, and the nates more flat, and its folds more low, but there is even an apparent elongation of the limb at the knee and ankle; and in some cases I have seen these characters fully as striking as in cases of genuine simple *morbus coxæ*.

I have no doubt that nodes are sometimes excited by the injudicious use of mercury, or by the irregularities of the patient. I have known cases in which mercury having been largely and repeatedly employed for the cure of other symptoms, and the patient having been again subjected to a fresh course of mercury, has complained, even while his system was decidedly under the influence of this medicine, of a swelling and tenderness of one or more of the long bones. The tubercles of the tibia are frequently the seats of this affection; when thus attacked they are not seen to

become much enlarged, but are rather soft, and exquisitely tender to the touch; and not unfrequently the integuments covering them assume a reddish tint. Nodes which form from the above cause on other parts of the long bones, are, from their commencement, very painful, and of different size in different individuals; but in all cases they are rather soft. The pain, attendant on all these, is more widely spread along the limb than in cases of purely syphilitic nodes. Of course, patients under such circumstances are not fit subjects for the use of mercury. Blistering these tumours will generally procure temporary relief from pain, while, at the same time, we shall use our best endeavours to repair the mischief caused in the constitution by the injudicious use of mercury. And here I must add, that it has never fallen to my lot to witness an instance of the use of mercury producing nodes, except when it was administered for the cure of the venereal disease.

Affections of the larger joints are not unfrequent among patients labouring under secondary syphilis, and more so while the disease is seated in those parts which Mr. Hunter has classed as "the first order of parts;" they may also often be met with when the disease is seated in the parts "second in order." These affections do not deserve the title of purely syphilitic symptoms; at least I cannot recollect having seen them, except in cases where the patient had undergone a course of mercury for some form of secondary syphilis, and where, notwithstanding, the disease was not thoroughly subdued.

Effusions into, and distensions of, the synovial membranes and bursæ of the large joints are very frequently met with in patients labouring under secondary syphilis. I cannot venture to say that these never are purely venereal symptoms; but as far as my memory serves me, those I have witnessed might, with very few exceptions, be traced to mercurial courses mismanaged, either on the part of the surgeon or of the patient. In a few cases they may have been caused by the over-exertion of the limb. The knee and elbow are the joints most frequently thus affected—the wrist less frequently; but when it does occur, it presents a more obstinate and intractable case. Although these swellings may not be considered as purely venereal symptoms, yet that they are more or less connected with syphilis would appear from this fact, that when they have resisted (as they occasionally do) blistering and a variety of topical treatment, they readily yield, along with the true venereal symptoms, to a subsequent judicious use of mercury.

In connection with these affections of the joints, I would just observe, that syphilitic patients often complain of pains in the limbs; when these are described as passing along the greater extent of the limb, and particularly if on enquiry we learn that they, at different times, attack different parts of it, we may be assured that, unless they prove to be the precursors of some fresh eruption, they are not venereal—that mercury will not relieve them, and that they have been caused by mercury. The only

condition which forms an exception to this opinion, is the case of a node on the fibula; for this is frequently attended with a more wide-spreading pain than a node in any other position.

I believe it is unnecessary to notice the incorrectness of that opinion which considers nocturnal exacerbations as pathognomonic of venereal pains. The pains of gout and rheumatism also obey a similar law.

A very common form of those affections is observed in the elbow joint; the patient has not full power of it, he cannot fully flex it, nor extend it much beyond a right angle; very rarely is there any pain or any tenderness from pressure, when made upon the prominent parts of the joint. Not unfrequently this affection of the joint is attended by tumefaction, caused by effusion into some of the adjacent bursæ; but in all these cases we feel the tendon of the biceps extremely rigid, yet not swollen or tender to the touch. As a further proof that this symptom is not purely venereal, we find that it sometimes yields to blisters—often to blisters and to a course of sarsaparilla. It is not benefited by putting the patient immediately under a second course of mercury, although it is found to yield *pari passu* with the truly venereal symptoms to the powers of this medicine, when employed with judgment and under favourable circumstances.

A similar, but much more rare affection, is that which engages the knee. The joint, in this case, though to a certain degree movable by the hand of another, can be moved only in a very trifling degree by the patient. No swelling or tenderness necessarily attends, but the hamstring tendons are felt as tense as it is possible to imagine them to be, although the muscles are not in action.

Venereal Affections of the Testicle.

On the subject of venereal swelled testicle I have but very little to offer. It is among the latest symptoms of the disease; it generally takes place slowly, without much pain, and it continues of the same indolent character throughout its entire course. I cannot recollect any case of what I consider purely venereal swelled testis which went on to suppuration, although I have seen this occurrence take place in some where the debilitated and deranged state of health appeared to be the exciting causes of this result. If I were to attempt a description of this affection, I should say that the entire of the organ—that is, both the epididymis and the body of the testis—are involved in one common swelling; that the tumour presents to the eye a surface smooth and but little discoloured, and to the feel a firm and uniform consistence, but nothing of a stony hardness, nor is it very weighty in proportion to its bulk; a fulness, but not hardness, of the cord can also be felt. These, I conceive, are its leading features. I shall not attempt to discriminate it from the cancerous testicle, nor from that condition of the gland which is by some denominated scrofulous, a term which is often

applied with very little reason or accuracy to many anomalous swellings of the testicle. A reference to the history of the case, and the coexistence of some other symptom of a syphilitic nature, can alone enable us to form a correct diagnosis. The syphilitic testicle, in a patient of unbroken health, is one of those symptoms which yields most regularly and uninterruptedly to the action of mercury, when judiciously administered; the gland also, to all appearance, regains its healthy structure, and is enabled to resume its function.

But in some instances the venereal affection of the testicle appears under very different characters. When the gland becomes engaged in a patient who is naturally of a bad habit of body, or whose health has been broken down by repeated and mismanaged courses of mercury; one, in short, in whom the local affection may be ascribed fully as much to a reduced state of health as to a venereal taint. In such, I say, the condition of the testicle is very different from that which we may consider a purely venereal swelled testicle; for the swelling in many such cases does not involve in one common mass, both the epididymis and the body of the gland; nor does it, in general, acquire the same magnitude as the purely venereal swelling of the testis. In such cases, we not unfrequently find, on a careful examination, one or two points into which the end of the finger appears to sink, as if a fluid, or a small cavity, existed beneath the skin. But these two affections of the testis differ very widely in another most essential point—namely, as to their treatment; for, in the latter form of the disease, the treatment becomes a matter of great difficulty, and one which requires very nice discrimination and sound judgment; because we have to contend not only with a shattered system, but with such a combination of local and constitutional derangements as frequently cause our patient to sink under accumulated sufferings; the disease of the testicle being the mildest of his complaints.

Such patients may be considered as in the very last stage of the venereal disease, and on the very threshold of being afflicted with those constitutional changes which (from experience) are known to be the prelude of death; and which bring to a close the existence of those who have thus been the unhappy victims of protracted syphilis.

Some few, however, of these cases admit of being cured—that is, life may be saved; but the testicle cannot ever after be considered as restored to its perfectly healthy state, for we shall always be able to discover by the touch a considerable deviation from its healthy feel; we shall find, also, that it is in general rather wasted, and that there is some degree of hardness remaining in the greater portion of it, while a deep depression and a softness may be felt in one or two spots.

Having now glanced at this long catalogue of miseries, to which the venereal disease gives birth, and having also touched upon the appropriate treatment, it is scarcely necessary for me to remind the reader, that either the injudicious use of mercury, or the misconduct

of the patient, has a large share in inducing some of these pernicious consequences, and in rendering many of them most unmanageable. How erroneous then must have been that opinion, which for a time took possession of the minds of surgeons, when they imagined that a disease was proved to be not venereal, merely because it was not cured by mercury, or perhaps because it was made worse by this medicine! By acting on this opinion, the surgeon was obliged, in the after-treatment of the case, to have recourse to any or almost every other medicine, and to every remedial measure, rather than again resort to that which had already done so much mischief. In those protracted cases, some surgeons came to the conclusion that the symptoms which they witnessed could not be venereal, because such a lengthened period as two or three years had intervened since the receipt of the original infection, or appearance of the primary disease. If we take the trouble to trace the history of any number of these cases of protracted syphilis, we shall find that they present considerable variety; thus in some it may have continued for five or six years in a very mild degree indeed, while other unhappy sufferers have been subjected to almost every symptom of the disease, many of which too have afflicted them simultaneously, and with peculiar and aggravated severity.

From a vast number of cases of this description which I have witnessed, and of which I have notes, I shall here adduce two only to prove that this disease may exist, in an obvious form, for at least five or six years. The first of these cases shows that the symptoms, few and mild, never completely disappeared; that they did not give rise to any further symptoms; and that being only kept in check by repeated and insufficient courses of mercury, they continued to exist, and yet did not very materially disturb or injure the general health.

Mr. H., in June 1830, was treated for a recent chancre, by pills of calomel, which he took to rather a large amount, and for a period of six weeks. By this treatment his mouth was not at any time satisfactorily made sore; indeed it was only affected at intervals, and then very slightly, although the mercury was pushed so as frequently to disturb the bowels, to impair his appetite, and to injure his sleep. In the course of eleven months after the healing of the chancre, he was affected with iritis, and a few clusters of papular venereal eruption; these symptoms were made to recede, though slowly, by a course of Plummer's pill, which acted in a manner equally unsatisfactory as the plain calomel had done.

In August, 1831, a cluster of these papulæ appeared on the left temple, and he also was affected with a superficial ulceration of the membrane covering the septum nasi, a little way above the anterior edge of the septum. He was then directed to take hydr. oxymur. in solution, to the amount of an eighth of a grain every day; and also to combine with it decoct. sarsæ c. extr. fluid. sarsæ. To the ulcer in the nose he applied ungt. hydr. nitr. diluted with seven parts of lard; this process he continued for three weeks, when

he was called away to the country, the symptoms having been nearly removed.

In November, 1832, he again applied for advice, on account of the same symptoms, which were very much in the same state as in August, 1831. He was again directed the ungt. hydr. nitr. and the lotio nigra, as applications to the ulcers in the nose, and to take pil. hyd. gr. iij. extr. conii gr. ij. sing. noct. ; this plan he continued without any variation, except that of increasing the dose of the pills, from the middle of November until the 20th of December, when he again went away into the country, his symptoms being a good deal subdued, but obviously not cured.

In April, 1833, he applied to me for the same symptoms, and in precisely the same state, in which he exhibited them in November, 1832. He was now directed pills of calomel, antim. tart. and opium, so as to take two grains of calomel every night—the same applications as formerly to the nose. This plan he commenced on the 26th of April, and finished on the 17th of June. Even now the mercury did not act in a favourable manner, and he left town with his symptoms all but well.

January 15th, 1834, he called on me, and declared that he was firmly resolved to use every means, and for any length of time that I might think necessary, for the removal of all traces of this complaint. At that period the symptoms were as follow: the cluster of papular eruption on the temple existed as before; the septum nasi was superficially ulcerated in each nostril; the ulcers were seated not far from the anterior edge of the septum, but not on corresponding parts of it; these ulcers were neither painful, nor very sore, nor was there much surrounding inflammation, but they exhibited very distinctly the characters of venereal ulcers.

I now directed for him, R. calomelanos ̄ i. pulv. ipecac. comp. 3ss. fiant pilulæ decem. Sumat unam mane nocteq. The ulcers to be lightly touched, two or three times a day, with ungt. hydr. nitr. dilut.

January 31st, 1834. Upper gums ulcerated, and sufficiently affected; ptyalism is apparently coming on; he is languid, especially in the evenings. Appetite good, thirst not urgent, some griping. R. inf. cinchonæ ̄ vi. tinct. cinchonæ 3vi. tinct. opii gutt. xxx. syrapi 3ss. m. sumat 3i ter in die. Repet. pilulæ.

February 5th. He feels much strengthened since he began the bark mixture; upper gums are much fuller, and more ulcerated; sleeps well. Repet. pil. and mist.

February 11th. Mouth is sufficiently affected; ptyalism is established, but not copiously; ulcers of the nose appear to be perfectly healed. Repet. mist. Sumat pil. unam sing. noct.

February 21st. Mouth is still fully affected; he is more oppressed with languor. He goes to the country to-morrow, being called away by professional business, and promises to keep within doors, and take the pills a fortnight longer.

I have seen this gentleman lately; he continues free from any return of his disease, and enjoys excellent health.

In the history of the following case we shall find the disease passing through its different stages, and yet retaining firm possession of the parts already attacked, while it proceeded to fix itself in some new situation, resisting at various periods the use of all anti-venereal medicines, as well as of various remedial measures—mercury in various forms, sarsaparilla, acids, alkalies, opium, arsenic, sea-bathing, country air, &c. &c.; and yet, at the end of six years, finally cured by mercurial unction, pushed to a smart ptyalism, while the patient was confined to the house.

Mr. A. applied to me in July, 1828, for the cure of a recent chancre. He used mercury under my care for four weeks; although the medicine did not act in a kindly manner, still the ulcer was nearly healed at the end of the month. Circumstances, over which he had not control, obliged him now to apply to another surgeon, who in a few days advised him to lay aside the mercury. He returned to me again in the course of six weeks, complaining of sore throat and venereal eruption—Psoriasis. I advised pil. hydr., which he used for a few weeks, and then went into the country, having derived very little benefit from the course I had directed for him; for in this, as in the first instance, the system received the mercury in a very unkindly manner. After an absence of seven or eight weeks, during which he laid aside all mercurial medicines, he again applied to me with his throat more uneasy, and the eruption still out. Mercury was again resorted to, but appeared to disagree with him more decidedly than hitherto. A node formed in the course of a few months, and his left testicle became hard and enlarged. After the complaint in the testicle was established, his general health seemed to improve a good deal; and for some months prior to April, 1829, he complained chiefly of the size of the testis, which was increased by effusion into the tunica vaginalis.

On the 11th of April, 1829, I learned from him that, without any assignable cause, within the last fortnight his health had very much declined; and his symptoms at present are, a node on the lower part of the right tibia, from the upper part of which bone another node had been removed about three weeks ago, by the application of two blisters; painful swelling of the left tarsus; the end of the node is a good deal swollen, and beset with a cluster of pustules, which are covered with white flat scabs; two of the pustules, however, have scales which affect the shape of rupia; a broad flat scab on the left zygoma, testicle enlarged and hardened, and affected with hydrocele; both arches of the palate have white ulcers on their edges; a yellow foul ulcer on the back of the pharynx, high up; pulse 108, skin hot.

I advised a pill, composed of pulv. Jacobi gr. ij. calomel gr. i. omni nocte.

April 29th. For some days past he has complained of pain on the inner side of both knees,—this is felt most severely when he coughs or sighs; the knees are free from swelling: the mouth, within the last three days, has become very slightly affected; the

ulceration of the throat heals in one spot, and breaks out in another; pulse still 108; the right nostril feels stuffed, and the membrane covering the lower spongy bone is thickened and ulcerated; some new spots of eruption have appeared. Omittatur calomel. Pope's extract of sarsaparilla.

May 31st, 1829. He is able to walk and jaunt about, has acquired a good appetite, and sleeps well; he has picked off the scabs from the end of the nose, which now presents a very irregular rugged surface; the throat is healed; the nose, internally, is much better, but not yet healed; the testicle is very little improved; pulse still at 96.

July 1st, 1829. Flesh and complexion improved; general health very good; pulse still 96. He now complains only of weakness in his knees.

November 6th, 1829. About the middle of July his throat again ulcerated, his strength and appetite failed him. A strong solution of arg. nitr. (℥i. in ℥i.) was daily applied to the ulcers of the throat: and he took small doses of blue pill and cicuta until the beginning of September. No very sensible effect of the mercury on his mouth; yet the throat was nearly healed, and his general health re-established. But this happy state did not continue long; for in the latter end of October, the right anterior arch of the palate became very much swollen and red, with a whitish sloughy ulcer on its centre, attended by much pain. I now feared that the entire arch would have been destroyed by sloughing; but this evil was averted by the application of various caustics—solut. arg. nit., mur. antim., and solut. sulph. cupri—of these, the mur. antim. seemed to be the most useful. The edge of the arch, however, and a part of the right tonsil, were destroyed.

When his throat was nearly healed, he began to complain of pain passing from the right hip down the thigh; at the same time a considerable effusion into the knee took place. These symptoms were much relieved for five or six days by the exhibition of *spterebinthinæ* internally; but after this short period this medicine seemed to have lost its influence altogether. I now gave him *pil. hyd. gr. iv. pulv. Jacobi gr. ii. semel in die*, and, after a week, increased them to two pills daily; by this treatment no sensible mercurial action was produced, and yet his symptoms all yielded.

Feb. 8th, 1836. This amendment continued only for twelve or fourteen days, he then complained of renewed soreness of throat and stuffing of his nose. Ulceration now seized on the left anterior arch, and at the same time a deep circular ulcer formed on the back of the pharynx, immediately above the edge of the velum; a small node has arisen on the fibula, a little above the outer ankle; about ten days ago, a scab of *rupia* falling off the right leg, exhibited the surface healed, while a larger *rupia* on the left thigh is daily extending in its circumference.

It were an useless waste of time to describe in detail the further progress of this case, and the line of treatment adopted; it will be quite enough to say that I had to contend with symptoms such as

have been already described: thus these symptoms occasionally, and with them his general health, improved for a time; but that the ulcerated throat, ulcers on the surface of the body, and swelling of both testes continued to exist, although the ulcers would heal up in one part, and then seize upon some new spot: and shall merely state that in August, 1832, a node appeared on his forehead, and another on his right thigh. During parts of this long period his general health would improve very much, and this improvement was sometimes apparently produced, but always for a time promoted, by his going into the country, or repairing for a time to the sea-coast. Yet such happy intervals were never of a longer duration than four or five weeks. During this amended state of his general health the local symptoms became less severe and less troublesome; but they did not at any time disappear entirely, even for a very short period.

The treatment was at one time with various internal preparations of mercury, and on two occasions with ten-grain doses of mercurial ointment. Sarsaparilla, bark, acids, cicuta, alkalies, arsenic, and opium,—each of these would appear, for a short time, to afford benefit, but I was compelled to lay them aside when I saw the general health and the local symptoms fall back after each of them had been employed for some time.

In this vacillating condition of amendment and relapses was passed the long period from Feb. 1830, until Nov. 1833. I now determined to employ mercury in such a manner as to induce a smart degree of ptyalism in a short period,—having prevailed on him to employ this process under strict confinement to the house. The state of his case at that time is here annexed.

Nov. 8th, 1833. Mr. A. has at least from twenty to thirty ulcers, chiefly on his limbs; some of these had about six months previously commenced in the form of soft round tumours the size of a marble; these came slowly to suppuration, and on opening exposed cavities which were occupied in part by a soft white slough. This was not confined to the limits of each ulcer, but was seen to stretch beyond the borders of its cavity. Others of these ulcers had begun as pustules, forming on the edge of some old cicatrix, then ulcerating and spreading into sores varying in size from that of a shilling to that of half a crown. From the nose he daily, with great effort, blew down large brown crusts or scabs. Behind the velum palati, and very high up towards the base of the skull, was an ulcer which created very considerable uneasiness, although it did not render deglutition very painful; his face, especially his forehead and cheeks, were thickly studded over with tubercles of a dark copper colour; the upper lip and nose were a good deal swollen and thickened; he had a pretty large node on the head and another on the femur, but these were in an indolent state; both testicles were very much enlarged, quite beyond the ordinary enlargement of diseased testicles; in the tunica vaginalis of the left there was a quantity of fluid; his general health was tolerably good; he was not emaciated, nor had he any degree of

hectic; but for the last two months he has complained of a sensation of fulness in the epigastric region, more troublesome after taking food; on examination the liver was found to descend much too low; no trace of jaundice.

Nov. 8th. Sumat pil. hyd. gr. iii. ext. cicutæ gr. i. ter in die. Ungt. hyd. fort. 3ss. omni nocte.

Nov. 10th. No sensible effect from the mercury; he complains that the skin in front of his thigh is extremely tender, although it is perfectly free from any discoloration or swelling; in the centre of this very sensitive skin is a cluster of tubercles, now covered with scabby crusts.

Nov. 12th. Pulse 96; gums swelling; mercurial fetor pretty strong; some scabs on the thighs are drying and seem disposed to fall off.

Nov. 14th. The bowels have been dysenterically affected yesterday and this day; has not used any mercury to-day; cheeks are swollen, gums ulcerated, tongue sore to his feelings, but is not ulcerated; says that he has no sense of weakness: the tubercles on his face are very much improved, less swollen or full, and of a less bright colour; the soreness of the skin around the scabs on his thigh, which had been very distressing, is now quite gone. Omit. ungt. et pil.

Nov. 17th. Mouth as on the 14th; he sleeps well; has a good appetite, but cannot admit solid food; pulse 96; he has lost all feeling of fulness or uneasiness of stomach; the improvement in colour of all those parts of the face which had been occupied by the tubercles is more striking; swelling and thickening of lip and nose are materially reduced; tubercles are smaller in circumference, and much more flat; ulcers of the limbs are all clean and healthy; scabs on the thighs are fast approaching to fall off, they are contracted in circumference and height, their edges dry and detached from the skin; in a word, there is every prospect of a speedy cure of this very tedious disease by the present course of mercury. Repet. ungt. et pilulæ hyd.

Nov. 24th. Mouth still sore; appetite good; pulse 78; skin temperate; sleeps for five or six hours every night; ulcers are all covered with luxuriant granulations, and are healing; scabs all drying and look as if about to fall off; he can read with pleasure not only light books, but even those on professional subjects; on two separate days only, since the last report, has he omitted the pills and ointment: the ointment has been always applied to the abdomen, as the numerous ulcers of the limbs prevented its application to them. Pergat.

Dec. 3d. Has not used any mercury for the last three days; bowels have been purged each day so much as to require opium; the mouth is fully sore; the discoloured spots on the face present a more faded colour, and the appearance of the face is altogether vastly improved; among all the numerous scabs, from one only on the fore-arm could I press out one small drop of matter.

Dec. 7th. Had a sense of weakness last night when going to bed, but no palpitation then or at any other time; pulse 74;

appetite good ; no thirst ; sleeps well ; mouth overflows at night ; a crust has come down from the left nostril ; both testicles are hard, fully one third larger than natural ; with fluid to the amount of an ounce in each tunica vaginalis. *Mist. c. sulph. quinae ter in die. Ungt. hyd. fort. ði. quotidie testibus affricand.*

Dec. 10th. Pulse 76 ; sleeps well ; appetite good, but cannot make use of solids ; no thirst ; skin cool ; countenance good ; mouth quite sore enough ; ptyalism reduced ; yesterday, immediately after a large discharge from his bowels, felt a weakness for ten minutes, but not the slightest feel of palpitation ; scabs have dropped off from every ulcer, except two or three small ones. *Omitantur ungt. hyd. et pil. hyd. Rep. mist. c. sulph. quinae.*

Dec. 14th. Yesterday and this day has been teased with dysenteric purging, for which he took each day *R. opii. gutt. xxv. ; mouth still very sore ; pulse 96 ; skin hot. R. olei ricini 3vi. aq. cinam. 3vi. Tinct. rhei 3. ; tinct. opii gutt. xxx. M. fiat haust. statim sumendus.*

Dec. 26th. General health very good, he feels himself growing stronger ; mouth is now well, except around the lower dens sapientiae of left side, where the soft parts are ulcerated, although free from slough. *R. calomelanos ði. piper. indici gr. vi. fiant pilulæ septem. Sumat unam meridie nocteq.*

Here let me observe, that I was solicitous to bring his system again under the influence of mercury ; because his disease having been of such a very long standing, it seemed natural that it should require a very complete and long-continued influence of mercury to eradicate it effectually. And his constitution had been so much improved by the late ptyalism that I felt confident it would safely bear the ptyalism which I was about to inflict on it.

Dec. 31st. The pills on the night of the 27th purged him a good deal, so that he did not take another until the night of the 28th, when he took one only ; he has not since that time taken any more, because he found that this fourth pill not only had excited purging, but had also caused very considerable soreness of his mouth ; the gums, especially the inner gums, in both upper and lower jaws, present one ulcerated edge, and the cheeks, at the angles of the jaws, are swollen and ulcerated afresh ; the edge of the tongue feels to him sore, but it is not ulcerated ; with all this his pulse is 76 ; appetite good ; general health very good.

Jan. 9th, 1834. Mouth is still a little sore ; pulse quiet ; appetite for breakfast is bad,—for dinner, is good.

Jan. 30th. Testes, though smaller, are still hardened and enlarged ; all the fluid seems to have been absorbed ; no other trace of his former disease remains ; general health very good.

Nov. 2d. Mr. A. called on me this day ; he appears in excellent health ; can walk twelve or fourteen miles a day ; says that occasionally some crusts are expelled from the nose ; whenever this occurs, he uses the lotio nigra with immediate benefit ; pulse 80 ; testicles much reduced, the left one is little beyond the natural size ; right testis is still much too large.

November 2d, 1836. Mr. A. continues to enjoy excellent health ; very slight induration or enlargement of the testes still continues.

CHAPTER X.

ON THE USE OF MERCURY IN VENEREAL HECTIC FEVER.

I have long been impressed with an opinion that the judicious management of mercury, the adaptation of the medicine to the general condition of the patient, and to the circumstances and states of his venereal symptoms, afforded the most likely means of enabling us to overcome the disease of syphilis, under all the various forms, and in all the various combinations in which it presents itself to our view. In this opinion I feel confirmed by having ascertained that this very valuable medicine may be administered not only with safety, but with certain expectation of effecting a cure under circumstances of venereal symptoms and conditions of the constitution, which have hitherto been considered as absolutely prohibiting its use. I shall now proceed to consider this subject in detail.

Should a patient present himself labouring under secondary symptoms, at the same time complaining of total loss of appetite, of urgent thirst, emaciation to such an extreme degree that he is almost exhausted by night sweats, which oblige him to change his night dress two or three times every night ; under these circumstances I believe few surgeons would ask the question, can we venture to exhibit mercury to such a wretched sufferer ? I believe the usual answer and the usual practice in such cases would be to postpone the use of mercury, and to endeavour to bring the general health into better order, by means of country air, asses' milk, light nourishing diet, sarsaparilla, acids, &c. ; in fact, to use every other means rather than resort to mercury under these apparently disadvantageous conditions ; and no doubt many such patients have their health considerably improved by pursuing this restorative plan for a period of two or three months. However, at the expiration of this period, their venereal symptoms are found to be very little, if at all, amended, and sometimes they are even in a worse state than when they commenced this plan. I may also add, that in some cases of this extreme emaciation and hectic, the restorative plan altogether fails, and these individuals die as if worn out by the long continuance of the hectic ; or they are carried off by some of those affections which I have elsewhere described as the sequelæ or as the last stages of the venereal disease. (Vide History of the Disease.)

I am happy to have it in my power to declare that all this preparation and all this delay are absolutely unnecessary in such

cases; and I most confidently assert, that a patient affected with secondary symptoms, even though extremely attenuated, and as it were melting away under the effects of hectic, can with perfect safety and advantage at once commence a course of mercury, by which not only shall his venereal symptoms be removed, but at the same time his general health be re-established.

I shall not, however, attempt to establish this point by reasoning, or to persuade my reader merely by argument or assertion. I hope to convince by adducing facts; and the first case to which I wish to direct attention is that of Mr. G.

Nov. 21st, 1830. Mr. E. G. says, that seven weeks ago an ulcer appeared on the external skin of the penis; by application of the yellow wash (*lotio hyd. cor. sub. c. aq. calcis*) and of mercurial ointment, this quickly healed; a second ulcer appeared on the prepuce in eight days after the first was healed; to this he applied *lotio nigra* only; this now appears as a florid granulating ulcer of oblong shape, but with very hard base; his skin is every where covered with a venereal papular eruption; yesterday, for the first time, he felt his throat sore; a long superficial foul ulcer runs along almost the entire length of each tonsil; the gum around the lower right *dens sapientiæ* is ulcerated; he complains of pain of the shoulders, pain and tenderness of the sternum, which symptoms distress him more severely at night: on the left side of the neck a large mass of glandular swellings extends from the ear half way down to the clavicle; under the chin are two or three distinct large lymphatic glands, and about the same number are seen on the right side of the neck; none of these have the integuments red or discoloured; appetite very bad: bowels free, but not purged; has profuse night sweats, requiring him to change his night dress three or four times every night: he is much emaciated, and is very pale; pulse 120: he says that every day he thinks some fresh glands become enlarged, and that his strength is daily and rapidly declining, and is now at a very low ebb. *Descendat in baln. tepid. R. pil. hyd. gr. iii. extr. conii gr. ii. fiant pilula, mane nocteq. sumenda. Bibat decoct. sarsæ c. extr. fluid. sarsæ ad semilibram in die.*

Nov. 27th. Pains less; glandular swellings beginning to decline; ulceration about *dens sapientiæ* exhibits less of venereal character; night sweats appear to have ceased for the two last nights; appetite is now good: he reports himself as being much better in point of strength and general feeling. *Repet. pil. et decoct. sarsæ.*

Dec. 1st. *Sumat pil. i. sing. noct. Repet. decoct. sarsæ.*

Dec. 4th. Mouth affected; ulcers of tonsils better and much less soreness of throat; glandular swellings still more reduced; strength improved; sleeps well; appetite good. *Omitt. pilulæ.*

Dec. 17th. Mouth well; superficial ulcer of right tonsil improved; ulcer of left tonsil healed; gum still ulcerated, but not at all painful. *Sumat pil. i. mane et nocte. Repet. decoct. sarsæ.*

Dec. 29th. Gums are swollen; ulcer of the molar gum much better; pulse 100, after he had walked a quarter of a mile.

Jan. 10th, 1831. Mouth slightly affected: pulse 84. Sumat pil. i. merid. nocteq.

15th. Mouth slightly affected; has been long free from the pains of shoulders and sternum; eruption has long since disappeared; ulcers of tonsils healed, but the anterior arches appear rather too red and slightly swollen; glands of neck reducing more rapidly since he began to take two pills per diem. Repet. pil. i. bis in die et decoct. sarsæ.

Jan. 24th. Has taken three pills daily for the last five days; mouth slightly affected: he is obliged to go to England. Although all his venereal symptoms have disappeared, and the glandular swellings have been entirely removed, and his flesh and strength are now almost completely restored, still I think he has not used mercury enough to secure him against the danger of a relapse.

In the month of February, Mr. G. consulted Sir B. Brodie on account of a sore throat. Sir B. told him that his disease was not venereal, but the consequence of venereal, and ordered a pill of hyd. oxyn. gr. ss., to be taken at mid-day with ext. sarsæ. He used the medicine rather carelessly. He returned to Dublin in October following, with a decided venereal ulceration of right anterior arch of palate; but his general health was then pretty good, and there was not any return of the swellings of the lymphatic glands of the neck. By the use of hyd. calcinatus, combined with opium, and at the same time by the use of decoct. sarsæ, he got quite well in the course of six weeks.

Remarks.

I despair of being able accurately to depict the almost deplorable condition of this young man when he came under my care. His venereal symptoms were not, any of them, of a severe character; yet his general health appeared to be completely broken down. When we find him at once affected with loss of appetite, loss of sleep, quick pulse, profuse night sweats, wasting of flesh, loss of strength, enlargement of the cervical lymphatic glands, and every day adding to their number and size, a sure indication that the health was daily and hourly sinking, I think we here have a combination of symptoms, calculated to excite our most serious fears for the patient's safety. In fact, so rapid and headlong was the course of his symptoms that I altogether despaired of being able to check their progress by any restorative treatment, and therefore I determined to rely on small doses of mercury.

I admit that it may be questioned whether as to the sarsaparilla, the cicuta, and the mercury, which was the most useful remedy; or what share each of these had in arresting the progress of these alarming symptoms. But this much at least must be conceded, that in this case the mercury did not bar his recovery, nor did it produce any of those mischiefs which, from recent publications, we might have been led to anticipate. This case I have brought forward to show that mercury may be used (if used in very small

doses) while the system is as it were rapidly sinking under the pressure of hectic fever. In fact, we can hardly conceive any man who is yet able to walk two or three hundred yards, to be more reduced in flesh, colour, and strength. Nor can we imagine a more sharp degree of hectic fever; nor can I recall to mind any instance in which the glandular swellings or the scrofulous enlargement of the lymphatic glands had increased more rapidly. Let this case now stand as an instance of a very reduced state of health, and a very severe degree of hectic fever, not *forbidding the cautious* use of mercury. As, however, so many other remedies had been used along with the mercury, it is impossible to estimate what share the mercury had in effecting this very salutary change. I, therefore, feel myself called on to produce the following case, as an instance of the safety with which mercury may be used in a very low state of health, and how it will, in such a condition as would almost forbid its use, effect the cure of both primary and secondary symptoms:

John Yates, a labourer, æt. ann. 30, admitted into No. 11 ward, Dec. 17th, 1835.

On the external prepuce is a painful ulcer, the surrounding integuments are of a dark red colour; there is also a purulent discharge from under the prepuce, which is much swollen: an ulcerated bubo in each groin; through that on the left a lymphatic gland, larger than an almond, rises and projects considerably above the level of the skin; both tonsils are enlarged and of a coppery red colour; on the surface of the right tonsil is a small ulcer; he suffers much pain in swallowing; complains also of pains in the shins, and along the ulna of each arm; the surface of the body is covered with a papular eruption of a large size; appetite is very indifferent; he sleeps very badly; pulse 100; says that six weeks ago he first perceived a small ulcer on the glans penis, and a pustule on the prepuce, which inflamed and then ulcerated; very shortly afterwards a bubo appeared in each groin; about ten days ago the gland in the left groin became exposed, and began to protrude: three days prior to his admission he perceived the eruption; thinks he felt soreness in the throat in a week after he perceived the chancre: he has not taken any medicine.

From the day of his admission until Dec. 26th, he was directed to take repeated purgatives, generally a combination of calomel and jalap; but his bowels proved obstinate, and these medicines have produced much less of purgative effect than was wished for.

Dec. 26th. The symptoms being as at the time of his admission, I directed for him ungt. hyd. fort. gr. x. o. n.

Dec. 29th. Mouth sore, with some pyalism; both the buboes are much improved, presenting clean granulating surfaces; the protruded gland, I think, is a little retracted; a slight mercurial erythema at the top of his thighs. Mist. cinchonæ c. tr. opii. Omitt. ungt.

Jan. 2nd. 1836. Erythema is now gone; chancre and buboes looking healthy; the protruded gland is obviously, though slowly,

retiring; throat is much better; eruption very much faded. Repet. mist. cinch. c. tr. opii.

Jan. 4th. Repet. mist. Ungt. hyd. fort. gr. x. alt. noct.

Jan. 9th. Pergat.

Jan. 11th. Ungt. hyd. fort. gr. x. om. nocte. Repet. mist. cinch. Both tonsils are reduced to their natural size, but there still remain a few superficial ulcers on their surface; chancre is very nearly healed; buboes are healing rapidly; gland much more retired; eruption gone, stains of it are scarcely visible; prepuce still thickened, and its orifice much contracted, giving exit to a purulent discharge, for which I have directed the lotio nigra to be injected under the prepuce.

Jan. 15th. He complains most bitterly of a scalding at the anus; the buttocks on each side were opposed to one another; are covered with a thick purulent discharge; on wiping this away, the surface on each side is seen excoriated to twice the extent of a crown piece; no actual ulceration; the ulcers in both tonsils appear more deep than they were some days ago, and even seem disposed to open; the chancre and both buboes are improving, but now rather more slowly; mouth is sore.

From the 15th to the 30th of January he had purgat. mist. cinchonæ c. opio et lotio nigra for the excoriation.

Jan. 19th. Pulse 108, as he stands out of bed; tonsils look better; buboes and chancre have improved rapidly since 16th inst.; he appears much less feverish; excoriation is much less painful, although not yet healed in any one part.

Jan. 26th. Mouth nearly well; throat as before; chancre and buboes perfectly healed; excoriation healed in the more superficial parts; pulse 80 as he lies in bed. Repet. mist. cinch. et lotio nig.

Jan. 30th. Pulse 96 as he stands out of bed; anus quite well; he feels the throat more sore. Ungt. hyd. fort. gr. x. omni nocte.

Feb. 2nd. Repet. ungt. Sumat pil. hyd. gr. v. om. nocte.

Feb. 6th. Repet. ungt. om. nocte et pil. hyd. gr. v. bis in die.

Feb. 9th. Ungt. ði. om. nocte et pil. hyd. gr. v. ter in die. Mouth is not yet sufficiently sore; ulcers of tonsils are better, and he says he feels his throat better.

Feb. 23d. Discharged cured; not having used any mercury since the 10th, on which day his mouth was quite sore enough.

Remarks.

In my notes of this case taken on the 26th December, I find this remark: "I think there is not another surgeon in Dublin who would dare to give mercury to this man in the present circumstances of his case." From which may be inferred how very unpromising was his state at that time. Let us now advert more particularly to his history.

We have here combined, in the same individual, undoubted venereal symptoms (if any symptoms deserve that epithet) of the

primary and secondary class ; and these too without having suffered any modification from mercury, or indeed from any other plan of treatment. Yet we find that these clear and decided, or unadulterated venereal symptoms of each class, yielded to mercurial treatment, commenced while the system was in a febrile state ; and so early as on the twelfth day after the eruption began to show itself. So that here the practice was in direct opposition to two rules which I believe are pretty generally acted on by the profession, viz. 1st. Not to give mercury while there is much ferbile excitement ; 2ndly. Not to give mercury while an eruption is coming out, and while the eruptive fever continues. I am perfectly certain that had I used mercury in the ordinary doses of 3ss. or ʒi. of ungt. daily, the result would have been very unfortunate indeed. But, by apportioning the doses to the state of the constitution, the result has been most satisfactory, and the patient has been released from his sufferings, and has been cured of his disease, in a period of time shorter by one month, or six weeks, than he would have been, had he been subjected to the ordinary routine of practice, and had the mercury been withheld until the fever had subsided, and his general health to a certain degree been re-established. Another very remarkable feature in this case, is the very short period of time and the very small quantity of mercury employed in exciting ptyalism. Ten grains of mercurial ointment, used for three successive nights, brought the system as fully and satisfactorily under the influence of mercury as could be desired. And the state of the symptoms, as reported on the 11th of January, viz., in sixteen days from his commencing the use of mercury, shows that the effect of this mercurial treatment was as favourable as is seen in ordinary cases, where mercury is given in the usual doses, to a patient free from fever, and in circumstances deemed most fitted for the use of this medicine. This case presents a very striking fact, one for which I candidly admit that I am not able to account. We find that ten grains of ointment, used for four nights, from the 11th to the 15th of January, had produced that distressing effect, viz., a mercurial excoriation about the anus. This was only ten grains more than what had acted so favourably at the beginning of the course. But although I do not pretend to account for this effect of the mercury, I may be allowed to direct attention to it ; because I look upon this as a most unerring proof that the mercury is, at this time, too powerful in its action for the individual. Yet surely it will be granted, that the doses were not excessive, nor were they employed for any unreasonale length of time. Still, as an indication that mercury is now disagreeing with the system, I look upon this symptom as a very valuable addition to our rules of practice. Indeed I am of opinion that we cannot too highly prize any effect or test which will point out to us that mercury is disagreeing with the system. It is curious that this excoriation did not appear with the first ptyalism, but at the approach of the second. It is also remarkable, that this unkindly action of mercury had more injuriously affected the secondary than the primary symptoms. Had I

been using ʒi. or ʒss. of ungt. hydr. fort. instead of ten grains for a dose, then I might be told that the dose was too large. A short time ago I could not have expected such severe effects from so small a dose of mercury.

To those who are anxious to use mercury in the smallest possible quantity, this case must be very gratifying, as the whole quantity employed amounted only to four drams, and ten grains of ointment, with 110 grains of blue pill.

The venereal nature of this case will not, I believe, be disputed. The state of health at the time that mercury was first employed, is described in the report in a very few words; and though the description by no means corresponds with that usually given of hectic fever, yet that he was highly feverish, may be inferred from my private remark at that time, viz: "I think there is not another surgeon in Dublin who would dare to give mercury to this man in the present circumstances of his case."

I shall now adduce a case in which the symptoms were considered by me, and by all the hospital attendants, to be secondary venereal symptoms, and which yet did not admit of a verbal description that would satisfy one, who had not had an opportunity of personally examining the case, as to their venereal nature. The symptoms were a return of the same ulcers for which he had been in the hospital for two months previous to February last.—Markham, No. 12 ward.

In the history of his case he is described as having an extensive ulcer covering the upper lip and the tip of the nose, which has destroyed part of the septum, and part of the right ala nasi; and has also a large ulceration on the fore part of the left thigh, a little above the knee, and a small ulcer on the back of the leg. He had ulcers in all these places, of which he was apparently cured when he left the hospital in February last, having undergone a full course of mercury. On his return home he was much exposed to cold, and drank spirits to very great excess. In two months after leaving the hospital, the ulcer on the nose began to reappear; and, in four months more, that on the thigh also broke out.

From the time of his admission, (the 17th) until the 28th of November, he was directed to take the mineral acids. On the 28th he was ordered ungt. hydr. fort. ʒi. o. n.

On December 1st, R. tinct. acet. ferri, ʒi. hydr. cor. sub. gr. i. m. sumat cochl. minim. bis in die, et decocti hordei cyatho.

December 5th. His mouth is now very sore; a smart pytalism is established. Omittatur solutio. Curentur ulcera ungt. hydr. nitr. ʒi. diluta c. axungiae ʒi.

On the 28th of November I made this note—"This man was under my care, and was salivated when last in the hospital. He is now such a wretched looking creature that I have been afraid to use mercury with him since his admission; and I have but little encouragement to do so, as it already failed to cure him. However, as he must die unless something decisive be done, I shall venture on the use of mercury; for die he must under the ordinary treat-

ment, without mercury. No improvement whatever has taken place since his admission."

On the 13th of December I made the following note—"It is remarkable and most extraordinary how very readily ptyalism has been induced; and it is equally remarkable how very quickly and materially the ulcer of the lips and nose, and the swelling of these parts, have improved since the mercury came into action. The mouth is still smartly affected, and the cheeks swollen. The amendment during the last eight or ten days has been greater than could have been anticipated."

To finish the history of this case, I shall only add, that so speedy and complete was the healing of the ulcers of the face, and so decided the improvement of the ulcers of the limbs, that I did not feel myself justified in ordering any mercury after that of the 1st instant; we of course ceased at the end of four days. The ulcers were retarded in healing, partly by the great extent, and partly by being seated on the cicatrix of former ulcers. He left the hospital on the 27th of February, cured.

I cannot readily forget the surprise depicted in the countenance of the students, when they first heard me direct the pupil in charge of my prescription book, to write a scruple of ointment every night; indeed it was such as forced me to declare, "that if mercury did not cure him, I could not tell what would; and, most assuredly, if this man could bear mercury, there was no man who could not." I need not add, that the progress of the case (at least as long as under the influence of the mercurial action) was most anxiously watched by all the pupils.

It may not be amiss to state, that during (and probably owing to) the mercurial action a lymphatic gland under the chin inflamed, suppurated, and ulcerated; and it healed spontaneously after the action of the mercury had subsided.

In this case one very remarkable fact should not be passed over. I allude to the cure having been accomplished by such a very minute quantity of mercury; for the entire quantity used amounted only to three scruples of the ointment, and one grain of corrosive sublimate; and to use this small quantity seven days were employed.

Some, perhaps, will lay hold of this one fact, as an argument to show that the disease could not have been venereal; because here we have a cure accomplished by a quantity of mercury so infinitely less than what is universally considered as sufficient for the cure of any one symptom, in any stage of the venereal disease. But although such objection may be urged with effect, if applied to the cure of a strongly marked and decided or unsubdued symptom of syphilis, in an unbroken constitution, yet it will not hold good when applied to a case of a feverish, debilitated patient, affected with symptoms which had been subdued and weakened by previous mercurial treatment. In support of this assertion let me bring forward the following case:

Mr. O. R., æt. ann. 28, contracted a venereal disease four years

ago; and has been for a long time under the care of Mr. Peele, for the cure of secondary venereal ulcers: three or four of these, on the face, are most strikingly marked as venereal; a very extensive and deep ulcer of the calf of the leg is less strongly marked as syphilitic, but it commenced at the same time with the ulcers of the face. This ulcer had committed great havoc; it destroyed no small portion of the intermuscular cellular tissue, and had induced a sloughy state of what remained between the muscles of the calf; so that, even if the ulcers were perfectly healed, it was obvious that he must always remain lame of this leg. I had already seen him in consultation three or four times, at intervals of three or four weeks. On each of these occasions one principal subject of our deliberations was, whether we should resort to amputation. However, in consultation on the 17th of September, 1833, it was agreed that he should make trial of very minute doses of mercury; accordingly he was directed to take pil. hydr. gr. v. omn. nocte. Of these he had taken two only in as many nights, when his mouth became very sore, and a very small ptyalism ensued. All the ulcers, both of the face and leg, healed during the salivation; and he has since enjoyed good health, and is able to go about, wearing a high heel to his shoe. During the long period that disease continued, mercury had been tried more than once, and again abandoned, not having produced any decided benefit.

In this case the ulceration of the leg would have been early healed, if that object could have been accomplished by applications of different kinds most judiciously chosen, and these applied with a degree of skill and dexterity not to be surpassed, and with a zeal and attention which could scarcely be expected from a very attached friend. Yet the dexterity in applying and the judgment in choosing various local applications availed but little; nor was the use of mercury more serviceable, so long as the mercury failed to excite salivation; but the moment that the mercury chanced to be apportioned to the state of the system, and that it produced salivation, from that instant all the symptoms changed for the better, and the deep and extensive ulcers of the leg, and the disfiguring ulcers of the face, hastened to heal. Here it is remarkable, that so very small a quantity of mercury could have made such a decided impression on the general system; but it is quite clear that, in this case at least, this medicine acted not by its quantity, but by its having luckily taken a right direction, and made what I term a salutary impression on the salivary system.

In each of the consultations, our chief objection to the proposed amputation was the apprehension that the stump would be seized with the same kind of bad ulceration. I really thought that the leg was scarcely worth preserving, and that certainly we ought not to endanger the patient's life, in the slightest degree, from an anxiety to preserve such an useless limb.

I know many will be ready to exclaim, all this does not prove that the ulcers were venereal, for we know that mercury has cured many ulcerated legs, where no suspicion of a venereal taint could

be entertained. To this I can only answer, that the ulcers on the face presented to me what I considered very strong characters of venereal ulcers, and that they could be traced up to a venereal origin. Waving all arguments on the subject of these ulcers being venereal or not, what I contend for is this—that where we can trace ulcers, or any symptom, to a venereal origin, we may be allowed to suspect that they still partake of the nature of their exciting cause; and that under such circumstances we are justified in resorting to mercury. Had we not in this case been able to trace some connection with venereal infection, I am certain that we should not have dreamed of using mercury for the leg alone, so very different was the ulceration of this from any thing of secondary venereal ulcers. But the ulcers on the face had enough of venereal characters to call our attention, and to rouse our suspicions, as to their real nature.

So very sudden was the improvement that I did not afterwards see the patient until long after all the ulcers were healed, and then he was going about in perfect health, but obliged to use a high heel to his shoe.

A few more such instances would go far to overturn Mr. Hunter's position—"The quantity of mercury to be thrown into the constitution for the cure of any venereal complaint must be proportioned to the violence of the disease."—Page 508, London edition, 8vo, 1810.

CHAPTER XI.

MERCURY DURING VENEREAL ERUPTIONS.

I believe it is a pretty prevalent opinion at the present day, that when a venereal eruption is coming out, we should withhold mercury until the eruption be completed, lest we interfere with or interrupt that process. Another reason for withholding this medicine in such cases is, that the fever which accompanies the eruption is considered as unfriendly to the anti-venereal action of mercury. Now I am convinced, by repeated observations, that this rule not only may be departed from, but that it cannot be followed with advantage to the patient. My observations have been both where the eruptive fever was very slight, and also in cases where the fever was running pretty high preceding the appearance of the first eruption; but I imagine that that line of practice which is found safe and useful in the fever attending the first eruption (which is always of a more severe kind), cannot be dangerous in those slighter forms of fever which occasionally usher in and attend on the second or subsequent crops of eruption.

Some years ago I first adopted this plan of treatment in the case

of Mr. P., a young man who had been under my care for four weeks, for cure of a chancre and bubo. From my anxiety to get him quickly cured, I used mercury in doses too great for his system, and accordingly I failed to excite ptyalism, or to cure the local complaints. At the expiration of three weeks, the chancre was not quite healed, the bubo was red, painful, and enlarging. Sarsaparilla was now substituted for the mercury. When he had been nearly three weeks on this plan, a pustular eruption, accompanied by an eruptive fever of a hectic type, with profuse sweats, began to appear,—some spots of it of a very large size came upon his face. This made him very readily comply with my desire, that he should use small quantities of mercury, notwithstanding his last unfavourable experience of it. I directed pil. hyd. gr. iii. to be taken bis in die. I was delighted to see the eruption yield very quickly, the large pustular spots on the face dry and contract, and the crusts fall off,—no new spots appeared. And not only did the fever subside, but at the same time the original primary symptoms, which had heretofore proved so obstinate, now got well speedily and permanently. Now I make no doubt that this young man was cured of all his venereal complaints fully six weeks sooner by the course I adopted than he would have been had I deferred the use of mercury until the eruption had fully developed itself, and had left the system free from fever. Besides, he was saved from some unseemly and permanent cicatrices of the face, which the ulceration of this eruption so constantly leaves after it.

The same plan of treatment I adopted in the following case of a venereal eruption, one very different in form from the foregoing.

July 2d. Mr. T. informed me, that on 7th May he had commenced taking calomel, gr. iii. bis in die, for cure of a chancre, and continued the use of the medicine until about eleven days ago; during the entire of this time he was traveling through the country in such a manner as did not allow him to guard against cold or wet. He thinks his mouth was made slightly sore in a week after he had begun the use of mercury; and he endeavoured, but in vain, to keep up a slight soreness of it.

At present he is free from mercurial action, and complains much of sore throat; both sides of it are of a colour too highly red, and are swollen. The right tonsil is ulcerated, and a white slough occupies the entire ulcer.

Six days ago he first perceived on his forehead an eruption of small copper-coloured spots, scarcely raised above the surface; these are of the sandy or measles-like eruption. The prepuce, which with him naturally covers the glans, now cannot be brought over it, in consequence of a dark copper-coloured bump, as large as a filbert, which is seated behind the frænum, and occupies the site of the original chancre. He sleeps very badly, although he has not any pains of limbs, and he sweats towards morning. Pulse 108. I directed some James's powder, with nitrate of kali.

July 4th. Throat feels worse, and as if much swelled internally; much pain in swallowing; fauces much inflamed and thickened,

especially the uvula; ulcer of right tonsil is more decidedly venereal; snuffles much in speaking. R. pil. hyd. gr. ii. pulv. ant. gr. ii. rhei. gr. ii. fort. pil. duæ mane et nocte sumendæ.

July 7th. Symptoms not improved, rather worse; has had gout in one foot and hand since the 5th inst., but not so severe as to confine him to bed. Pil. hyd. gr. iii. Pulv. antim. gr. ii. bis in die.

July 10th. Eruption fading, and beginning to desquamate; uvula and velum are less swollen, and have less of inflammatory redness; voice much improved; has a bad taste in his mouth, but it is not brassy; it makes him dislike tea, of which he had been very fond: gums little, if at all, swollen; gout better; pulse 84. Repet. pilulæ ut 7th inst.

July 14th. Eruption and condition of throat stationary; mouth less affected with brassy taste; no ulceration of gums, but the cheeks exhibit the impression of the posterior molares; gout has seized on right angle. Sumat pil. hyd. gr. v. ter in die.

July 23d. Gums not ulcerated; throat less swollen, and ulceration better: eruption less bright. R. calomel pulv. antim. conf. opiate a. a. ði. Pil. xii. Sumat unam ter in die.

July 28th. Eruption much faded; skin of forehead much less red; throat less inflamed; voice perfectly re-established; mouth not more affected; appetite good; skin temperate; pulse 84; sleeps for three hours, and awakes in perspiration. Calomel conf. opiate a. a. ði. fort. pil. octo. Sumat unam ter in die.

Aug. 3d. Eruption has quite cleared away from the forehead, leaving only the discoloured pittings; ulcer of throat healed; scarcely any inflammatory redness or thickening; countenance much improved; brassy taste of mouth; gums not ulcerated, but cheeks of a leaden colour, and impressed by posterior molares; has been purged, with some pain; pulse 78; no night sweats. Repet. pil. ut 28th.

Aug. 9th. Mouth more affected; bowels moved once a day; symptoms have disappeared. Pergat.

Aug. 19th. Gums ulcerated; mouth sufficiently affected; stomach rather weak; no night sweats; lump on prepuce has left only some thickening; for the last four days the skin has come forward and covered the glans. Sumat pil. unam bis in die. Mist. c. sulph. quinæ et tinct. cinch. comp. bis in die.

Aug. 24th. Mouth is very fully and satisfactorily affected; ulceration of gums of dentes sapientiæ, and of the edge of the tongue corresponding with them; strong mercurial fetor; spots on the forehead have all left discoloured pits; prepuce lies forward; when retracted, no hardness to be felt; when pushed forward, some small hardness is either felt or suspected. Omitt. pil. Haust. purg. et. b. tepid.

Dec. 24. In excellent health; a globular hard spot, size of head of a large pin, in site of old lump, is the only vestige that remains of the disease.

Remarks.

In this case I was induced by the importunity of the patient to give mercury in the eruptive fever of secondary symptoms, even while only a very limited quantity of eruption had appeared; for he was obliged to be much abroad, and, of course, was most anxious to get rid of the eruption on his forehead as speedily as possible. I began with very *small doses* in combination with pulv. antim., a supposed febrifuge medicine. In addition, we observe that the gout attacked him on the second or third day of using mercury. Yet with all these disadvantages, on August 7th, when he had only taken twenty grains of pil. hyd., there was not only a check given to the symptoms, but even a marked improvement.

Now, had I followed the established rule of withholding mercury until the eruptive fever had ceased, what a delay to his recovery, what an injury to his pursuits, would he have had to suffer; and possibly in addition to this the ulcer of the throat might have created such an aggravation of fever, that it, combined with very inadequate nourishment, would have made it take an unfavourable turn, and begin to slough! Thus his voice might have been irretrievably injured. Or it is possible that, during the exasperated stage of fever, some spots of the eruption on his face might have ulcerated or have degenerated into rupia, and thus leave him more or less disagreeably marked. All these risks have been avoided, and the entire of the disease has been removed in a period of time little more than would have sufficed to get rid of the eruptive fever only. So that, by following the established practice, the patient would have barely begun the mercurial treatment; for, at the time that he would be laying it aside, if treated according to the plan pursued in this case, the duration of the mercurial course might have been a week or ten days shorter, had not the attack of gout prevented me from pushing on with the mercury. In this case, on 23d July, I ventured to give very full doses of mercury, nearly two grains of calomel three times a day. I was induced to do so because I found that his mouth had not been sufficiently affected by the pil. hyd., and I judged it perfectly safe to do so, because he had been for many days perfectly free from any febrile disturbance. I think it a satisfactory circumstance that in this case we had other symptoms than eruptions, (for we know that these will spontaneously improve after they have been out for a certain time,) particularly the hardened purple lump on the prepuce. We observed this to yield in proportion as the action of the mercury on the system was more fully established. The early exhibition of mercury, as here recommended, will therefore be found to possess the following advantages:—

1st. The patient is freed from the venereal disease in a much shorter space of time.

2d. The constitution is relieved from all the injury which it must sustain by a continuance of the eruptive fever.

3d. The local symptoms, thus arrested at their very onset, are prevented from committing any devastation or destruction of important parts, or from leaving after them unsightly cicatrices.

4th. The cure of the venereal disease is effected by a quantity of mercury infinitely smaller than what is ordinarily required for the removal of similar symptoms when allowed to develop themselves fully. This, by some practitioners, will be considered a great advantage.

Mr. D. applied to me with an ulcer on the glans penis, which I judged to be a chancre, and to be applied to which I directed the *lotio plumbi acetatis* for a few days. Being confined to my bed by an attack of gout, I did not see him for twenty days; I then found the chancre with so very healthy an appearance that I almost suspected I had been mistaken in supposing it to be a venereal ulcer. I advised him to continue the same lotion. In about three weeks more he called on me; he had now an eruption on his forehead and body, of a pustular character; his appetite good; pulse very quick; profuse night sweats. Notwithstanding this febrile state, I advised, May 22d, *pil. hyd. gr. iii. et pulv. antim. gr. ii. o. n.*

May 26th. No visible effect from the pills; the eruption on the forehead is scabbing, and has assumed a darker colour. *Sumat pil. hyd. gr. x. o. n.*

May 30th. Eruption fading; bad taste in the mouth; gums are not sore. *Pergat.*

June 2d. Eruption is every where fading; some fetor of breath; mouth not sore; night sweats continue. *Sumat pil. hyd. gr. x. omne nocte, et grana quinq. mane.*

June 13th. Mouth not sore; eruption fading. *Sumat pil. hyd. gr. x. m. et n.*

June 20th. Mouth not affected. *R. calomelanos gr. ii. opii. gr. ss. fort. pil. mane nocteq. sumenda.*

June 24th. Gums swelled and ulcerated; some ptyalism. *Omitt. pil. per dies decas, dein repetantur.*

July 3d. Has been smartly salivated, although he did not take any pills since 24th inst.; eruption completely removed.

The very delicate state of his health during the first month prevented me from increasing the doses of the mercury by larger additions than those above mentioned; but finding his strength and health so much improved at the end of the month, I then ventured to increase the doses by very large additions, and certainly with the happiest effect. Mr. D. is a young man naturally of a very delicate habit; his strength and flesh were reduced very much at the time I commenced the use of mercury under all the disadvantages of very accelerated pulse, and profuse night sweats.

The changes which the chancre underwent before healing, and the facility with which it healed under the use of so simple an application as *lotio acet. plumbi*, should teach us a great diffidence in deciding on the nature of primary ulcers.

I think I can scarcely too often repeat what I consider to be the grand rule for the treatment of these apparently deplorable cases,

that is, to apportion the doses of the mercury to that weakly state of the system which is thus marked by hectic fever and emaciation. If we neglect this means we shall most certainly fail in our attempts at cure; and I may even add, that we shall very generally render his condition worse by any other plan of treatment. A case which I have lately witnessed renders it extremely probable that the most serious consequences may be quickly induced by a material deviation from this plan. The facts are briefly these:— A young man, by name Mooney, of apparently sound and robust constitution, was received into the hospital, No. 11 ward; he was labouring under a smart degree of eruptive fever, and a crop of small mercurial pimples had made its appearance on the face, and was coming out on the trunk. I thought it a favourable case for trying the plan of employing mercury during the eruptive fever, and while the eruption was still coming out. Accordingly I directed that he should rub ungt. hyd. fort. gr. x. omni nocte; but by some mistake the clinical clerk wrote down ungt. hyd. ʒi. omni nocte. I was astonished on seeing the patient again in two days; he was in a most alarming state of fever, not purely inflammatory, although accompanied with very high vascular action, and with a very high degree of excitement and great restlessness, and his face full and flushed. This alarming condition made me search most anxiously to ascertain the cause; and on enquiry I discovered the mistake. I need not say that the mercury was laid aside, and a high degree of fever opposed by suitable treatment. As soon as the fever was sufficiently moderated, I made him resume the mercury in doses of ungt. hyd. gr. x. o. n. By this his mouth became soon though moderately affected, and the eruption was removed; so that he was dismissed from the hospital fully one month sooner than he would have been, had he been treated according to the established rule of endeavouring to subdue the fever, and allowing the eruption to come out very fully before we ventured upon the mercurial treatment. It is quite unnecessary for me to point out how much more expeditiously this disease may be treated on this plan, than it could have been by subjecting the patient either to the non-mercurial treatment, or by insisting on a long delay, prior to the commencement of the use of mercury.

As this practice is so much at variance with that generally followed, I feel it necessary to produce further evidence of its safety and advantages; and in doing so I shall select two cases of eruption which occurred at the same time, and which were treated on the two different plans. By comparing these together, the superiority of that which I have ventured to recommend will be most clearly established.

On the 17th of September, I was called upon to consult on the case of Mr. K., a young man, who had in his boyhood suffered severely from scrofula, which had left a permanent contraction of the right elbow, and numerous cicatrices on his neck. His present complaints are a pustular venereal eruption, pretty numerous on the trunk, with a few on the face; four or five of those on

the forehead are disposed to form scabs, and to ulcerate; one on the chin is larger, and incrustated over by the concretion of the discharge among the beard. Pains of the limbs, which had for some days been troublesome, have ceased since the eruption appeared. He complains of pain in the contracted elbow, but this is not attended with swelling, heat, or redness; pulse 72; countenance of a remarkably pale sickly hue.

I saw Mr. K. again, on October the 16th, when I found the spots of eruption on the face larger and more disposed to ulcerate; one especially, on the right eyebrow, seemed as if it would not only ulcerate, but spread rapidly; his countenance is still pale and sickly; no night sweats; the pain of the elbow has almost entirely ceased.

Since my first visit he has been taking decoct. sarsæ c. acid. nitr. dil.

His attending surgeon this day agreed to give him pil. hydr. gr. iij. et extr. conii gr. ij. bis in die.

I have not since seen Mr. K., but I have learned that he bore the mercury very well, and was cured in the ordinary time.

On the 22d of September, Mr. T. called on me, and informed me that for three weeks past he had been troubled with pains of the shoulders, which very much disturbed his sleep; but that within the last week, on the appearance of a rash, these pains had been materially relieved. At present the trunk of the body is thickly covered with a very minute eruption, not unlike small red sand. Some patches of the same eruption, collected in clusters, appear on his face; his countenance is very pale; appetite pretty good; pulse 112.

R. pil. hydr. gr. iij. extr. cicutæ gr. ij. ft. pil. mane nocteq. sumenda.

September 26th. Eruption out in greater quantity.

October 1st. Colour of eruption less vivid; spots on the face are inclined to desquamate; appetite pretty good; complains of weakness of stomach, which he thinks arises from a nauseous taste in his mouth; no thirst, pulse 108, less languor, sleeps well; no night sweats; no sensible mercurial effect on his mouth. Repet. pil. Sumat sulph. quinæ gr. ij. ter in die.

October 4th. Eruption on face still more faded in colour; that on the trunk less so; appetite good, sleeps well, and has less languor in the evening. He has now taken twenty-four pills; mouth not sensibly affected; has complained for a few days past of soreness of the right side of the throat, with pain passing into the ear; right palatine arches a little swollen, and of too high a red colour. Repet. pil. et affricetur 3ss. ungt. hydr. fort. sing. noct.

October 16th. Eruption has totally disappeared from the face; that on the trunk is of a very faded tint; inner gums of the lower incisores are ulcerated along the edge; no pain of the teeth, or pain from chewing, but painful aching from particles of food resting on the gums; appetite pretty good, sleeps well; pulse 108, when the finger is first applied to the wrist, and 96 when carefully

counted for some time. He now says that the pain of his throat has moved from the right to the left side, and to the left ear. On inspection, the fauces appear rather swollen, and of a colour too highly bright. No ulcer to be discovered. The cheeks opposite to the last molares are much swollen, and of a leaden colour. Pergat.

October 20th. Eruption completely removed; the gums are universally affected by ulceration of their edges, but without much swelling; he still complains of the soreness of his throat; the swelling and redness of the fauces continue; the edge of the anterior left arch is covered with an exudation of coagulated lymph, and the left tonsil is covered with the same. He feels himself very heavy; pulse 108. Omitt. pilulæ et ungt. hydr. Repet. mist. c. sulph. quinæ.

October 23d. He feels his throat much better, and it is much less swollen and less red; pulse 108. Ungt. hydr. fort. 3ss. omni nocte. Repet. mist. c. sulph. quinæ.

November 5th. Mercurial action has subsided, although he continued to use the ointment; and for the last four days has also taken pil. hydr. gr. v. bis in die. I have now directed for him two grains of calomel, with three grains of compound powder of ipecacuanha, ter in die. 3ss. ungt. hydr. fort. omni nocte.

November 10th. He has suffered severely the two last days from mercurial dysentery; the gums of both rows of incisores are swollen, and superficially ulcerated; the fauces of a high red colour, not unlike that attendant on scarlatina, with exudation of lymph on both tonsils. The under surface of the tongue is marked on each side by a narrow line of leaden-coloured slough, and a similar spot on the inside of the lower lip; pulse 108, skin hot, appetite very bad. He is continually spitting up fetid thick saliva, which he says comes from his throat; pulse 108.

The account of this case I shall conclude by saying, that the mercurial action was kept up for one week longer, and then the mercury was altogether discontinued.

I have coupled together the history of these two cases, which happened to come under my observation at the same time; and I think it may be useful to compare the progress of the one with the other. This comparison was instituted on the 16th of October; it will be seen that at that time Mr. K. had been for one month affected with the eruption, and in that period no advance towards its cure had been made; all this time was spent in improving the state of his general health; and, as it were, preparing him for the use of the remedy (mercury) which was to cure this eruption. His attending surgeon was averse to the early use of mercury in this case, although the constitution was at the time so little disturbed; for his pulse was only 72. I must observe that the pain of his elbow was merely owing to an affection of the skin; nor did it appear to his own surgeon, or to me, as connected with the joint. A case in which so little of febrile commotion existed, appeared to me as particularly favourable for the use of mercury in the early

stage of the eruption. Nor is the loss of time the only disadvantage attending this postponement of the use of mercury; for we find that one spot on his eyebrow threatened to ulcerate and to spread rapidly; now, had this taken that course, it must have destroyed the growth of the hair, and left a most unseemly bald spot with a silvery ground.

Mr. T., on the contrary, might be considered, on the 16th of October, as more than half cured; and as perfectly free from any risk of being disfigured by any part of the eruption going on to ulceration; for we find that although he had not commenced the use of mercury until the 22d of September, yet now the eruption had totally disappeared from his face, and that every where it was very much faded. His general health was fully as good as when he entered upon the treatment, although the mercury has now full possession of his system, the pulse being then even somewhat slower.

Nor are we to confine our views to the mere loss of time, accruing from the later exhibition of mercury; we should also take into account the ravages that may be committed by the disease during the time we withhold this remedy. Thus, in cases of an eruption which has a strong tendency to run into ulceration, such of the spots as form on the face, or on other exposed parts of the body, may produce ulcers which are not only painful and distressing at the time, but which will leave after them cicatrices the most unseemly, on account of the extraordinary silvery whiteness which they assume, and which remains through life. Besides, these cicatrices may form on the eyelids, lips, or nose, in such situations as to render a contraction of these parts absolutely unavoidable.

But I must not omit to mention another circumstance connected with Mr. T.'s case: he was of that peculiar constitution upon which the ordinary doses of mercury cannot be made to act so as to produce a moderate ptyalism. On more occasions than one he had been previously under my care, and also under that of others, for the cure of primary symptoms; but never, in any instance, was a manageable ptyalism induced. On each occasion recourse was finally had to frightfully large doses of mercury, and these had the effect of producing a most profuse and ungovernable ptyalism. By adopting the very small doses of mercury in the early, and in the febrile stage of the eruption, I succeeded in obtaining a moderate and controllable ptyalism; and, taught by this experience, I succeeded, on a subsequent occasion of chancre in the same individual, in effecting the cure with a moderate ptyalism, by employing mercury in doses considerably below those in ordinary use.

These two febrile states, viz. that of hectic and exhaustion, and that of the eruptive fever, require that the mercury should be administered in a manner peculiarly suited to such conditions. Were we to use mercury with these, as we do with venereal patients in general, I believe we should commit most serious mischief.

In these cases we should not commence with a larger dose than ten gr. of ungt. hydr. fort. every morning, or with an equivalent of blue pill; that is, about gr. iij. mane nocteque. However inconsiderable such doses may appear, still we shall be gratified to find that on the third or fourth day the mercury is acting in the most favourable and salutary manner on the system; and it but seldom occurs that these effects are deferred to the sixth or seventh day.

I am satisfied, from repeated observation, that we can calculate on the medicine acting in a salutary manner in such cases, with much more certainty than we can when it is administered to those who are in the enjoyment of more robust health, and who are free from fever, at the time we commence the course. The benefits derived from this early influence of mercury are particularly striking; for in a few days we have the happiness to witness the sudden change from misery and suffering, to comfort and enjoyment. Sleep and appetite return, night sweats cease, pains are removed; the improved ulcerated throat now allows the patient to swallow with comparative ease; and this, together with the increasing appetite, induce him to take more nourishment.

I do think that under no other circumstances shall we find the secondary symptoms removed so rapidly, and made entirely to disappear (at least for the time), with so small a quantity of mercury. The quantity of ointment employed on such occasions sometimes does not exceed three or four drams; and not only are the secondary symptoms dispersed, but the general health is proportionably improved, so that the patient rapidly acquires strength and flesh. Those who are anxious to have the least possible quantity of mercury introduced into the system, will be pleased with this mode of proceeding.

CHAPTER XII.

ON THE TREATMENT OF SYPHILIS IN SCROFULOUS PATIENTS.

Mr. Hunter having clearly shown that in many cases venereal ulcers are kept from healing, and other symptoms from being cured by mercury, in consequence of the supervention of a scrofulous action, surgeons have naturally referred many instances of the obstinacy of venereal symptoms to this cause. This theory has had great influence, and has even reached such a length, that the opinion came to be generally entertained by practitioners, that scrofulous patients are unfit subjects for the treatment of syphilis by mercury. And it has even been put forward by most of the anti-mercurial writers, as one of the great and peculiar advantages attendant on the non-mercurial plan of treatment of syphilis, that

scrofulous patients could be cured safely and effectually by that plan, while almost certain death awaited them if their venereal disease were treated by mercury.

Let us, however, appeal to facts and observation, and see whether the dread of scrofula in the management of venereal cases has not been carried too far, and has not deprived many such unfortunate patients of a safe and speedy remedy, instead of subjecting them to the slow, uncertain, and too often unsuccessful line of treatment, by the non-mercurial plan. To decide this question with accuracy, we should first observe that venereal patients present symptoms of scrofula under two very different conditions: first, a patient may have had some scrofulous disease before he contracted syphilis, *ex. gr.* a young man labouring under a scrofulous affection of the hip or knee joint, or a scrofulous ulceration of the cervical lymphatic glands, may become infected with venereal disease; and, secondly, a young man who, in his childhood, may have had scrofulous disease, but in whom it has long ceased to appear; or one in whom, though no traces of scrofula having ever been in action may appear, yet may exhibit an indolent enlargement of the cervical glands, at the time that he applies for the cure of some secondary venereal symptoms. On enquiry, we may learn that he had not been subject to any enlargement of these glands, until the eruptive fever preceding the secondary symptoms had arisen; that these enlargements took place either at the time that the secondary symptoms made their appearance, or perhaps immediately before them, that is, at a time when the general health became out of order. We, therefore, may be called on to treat a scrofulous patient in whom the disease of scrofula existed in action for a long time antecedent to the appearance of secondary syphilis, or one in whom the development of the scrofulous symptoms is coeval with, or perhaps induced by, the secondary venereal symptoms. We shall commence with the latter, of which the following are instances.

Let us first turn our attention to the case of a patient who has not any scrofulous disease in action, and in whom we are not able to discover any trace of the previous action of scrofula. Let us suppose that the eruptive fever which ushers in the secondary symptoms in the first order of parts, either sore throat or eruption, excites at the same time an enlargement of a greater or lesser number of the cervical glands; some of them may be clustered together into an undefined mass, while others remain distinct. This condition of the glands we may observe in some cases does not make its appearance for two or three weeks after the eruption or the sore throat; but sometimes it precedes them by an equal length of time. How are we to treat this complicated case? My answer is, that we are to proceed exactly in the same manner as if the venereal symptoms were uncombined with any such affection. The only difference to be made is, that in this complicated case, we should be anxious to bring on a smart degree of ptyalism, and with the least possible delay; but at the same time one that we shall be able to control.

In directing the doses of the mercury, we are of course to be guided by the existing state of the general health, and we are to suit the former to the latter. As soon as the mercury has produced its legitimate effect, we must add to the mercurials such other treatment as is best calculated to invigorate and support the general system; and this the more particularly, if the case seems to require a prolonged use of mercury. I shall now adduce some cases in support of my assertion, that such scrofulous affections as are ushered in by the eruptive fever along with secondary venereal symptoms, not only will bear mercury, but will yield to the action of this medicine exactly as the syphilitic symptoms themselves yield.

And here I would refer the reader to the case of Mr. G—, page 127, as a very striking instance of the safety and advantage with which mercury can be given in cases attended with this enlargement of the lymphatic glands accompanying secondary venereal symptoms. In that case the mercury was commenced under most unpromising circumstances; and yet we found that so far from these swellings being irritated and injured, they were, on the contrary, removed by it, and they appeared to have retired *pari passu* with the truly venereal symptoms.

In the following case the use of mercury was commenced under more favourable auspices, the general health not being much impaired; the doses of the mercury were accordingly larger, and the result was equally fortunate.

March 14th, 1834. Robert White, æt. 36, was admitted into the 12th ward; he states, that eight months ago he contracted a chancre, which he attempted to cure by taking pills for three weeks, while he was exposed to the weather; the pills salivated him.

In December last an eruption, preceded by pain of the head and limbs, appeared over his entire body; and, at the same time, he felt his throat sore. Two months previous to the eruption, he observed a swelling of one of the lymphatic glands on the left side of the neck; this swelling did not ulcerate sooner than three months after it first made its appearance. For relief of these symptoms he took, for two months, a mixture given to him at the Talbot Dispensary. The throat grew better, owing, as he thinks, to the use of a gargle; the eruption was not improved. At present we observe on the trunk an eruption of papulæ, of rather a large size, sparingly scattered; on the limbs, an eruption of similar appearance, but of a smaller size. The eruption on the face is of the small measly kind, and did not come on until a few weeks after that on the trunk and limbs. Mist. purg. baln. tepid.

March 18th. Ung. hydr. fort. 3ss. omni nocte, pil. hydr. gr. v. omni nocte. I shall not trouble my reader with any more minute details of the practice in this case, than to say that, during the entire treatment, whenever mercury was employed the preparations used were those above mentioned; and the doses were varied according to existing circumstances. He bore the mercury very well; ptyalism was induced without difficulty, and kept up with

but slight intermissions. He left the hospital on the 12th of May, at which time the ulcer had not entirely healed, although it was reduced to a mere line; but the skin forming the edges of this line did not adhere to the surface of the granulations which they covered; and the discoloration in the vicinity of the edges had not entirely disappeared. In this case it was plain that the scrofulous affection of the glands had been excited, either by the unguarded use of some mercurial medicine, or by the mere action of the venereal poison acting on a scrofulous habit: and it is equally obvious that the presence of this scrofulous condition did not prevent the mercury from acting on the system as it acts on the most healthy habits, and effecting a cure of the venereal with the usual readiness and certainty. And surely it is not too much to add, that it did not exhibit any unfavourable action on the scrofulous symptoms.

August 2d, 1834. Michael Bruton, æt. 21, was admitted into the 12th ward. The lymphatic glands on each side of the neck are enlarged and indurated; particularly on the right side, where three or four, clustering together, form a large and irregular tumour under the angle of the jaw. On the left side, the glands affected are fewer in number, and smaller in size; one of them, however, is soft, and gives the feel of fluctuation. The integuments covering the enlarged glands retain their natural colour; no pain in the glands; he complains of night sweats and of pain in his chest, but he is not emaciated. A fading papular eruption occupies the integuments of the shoulders; and a few scattered papulæ are seen on his forehead, at the root of his hair: he complains of nocturnal pains of the shoulders and arms, and of the right wrist, where a slight enlargement of the bone is felt.

Three months ago he contracted a sore on the dorsum penis, which became as large as a sixpence; for this he used only a few common purges, and it healed in a month after its appearance. The glands of the neck then began to swell, and at the same time the pains attacked his shoulders and arms; and these, in another month, were followed by the eruption. He has not taken any medicine, except a few purgative pills.

August 9th. I put him on the use of mercury, 3ss, ung. hydr. fort. omni nocte, et pil. hydr. gr. v. ter in die, and find, on August the 30th, this report—"The glands on both sides of the neck have been much reduced by the ptyalism; that on the right side remains solid, that on the left side is soft with a fluid in it, but no redness of the skin, nor surrounding hardness, or other sign of active inflammation." From the 16th of August to the 6th of September, he discontinued the use of mercury. When resuming it on the 6th of September, I directed calomel gr. ij. opii gr. ʒ twice a day, with the view of quickly reviving the salivation; but in this I did not succeed, for the only effect was a slight ulceration of the gums, accompanied with tumefaction and angina-like redness of the throat, and an increased secretion, but no actual flow of saliva.

On the 25th of October he was dismissed cured. The glands

on the left side, which on his admission contained a fluid, had been punctured on the 6th of September; and, at the time of his discharge from the hospital, still yielded a very small quantity of purulent fluid; and it looked so well that I imagine it must have healed in the course of eight or ten days.

Here is a clear instance of enlargement of the cervical lymphatic glands, arising entirely from a venereal taint; certainly not in any degree excited by mercury, for he had not used any until after his admission into the hospital.

In a note which I made of this case, while the patient was in the hospital, I find it stated—"The result has been, that as soon as the mercury acted fully on the system, the glands began to decline *pari passu* with the eruption; and that both remained stationary when the action of the mercury was allowed to subside; and both finally disappeared under the renewed action of mercury.

Let me also refer my reader to the case of Mr. G., page 127, where the scrofulous enlargement of the cervical glands was daily, if not hourly, accumulating; and I think that he will admit that these cases fully bear out my assertions: 1st. That those scrofulous symptoms which come on along with secondary venereal symptoms, and which are almost a part of that disease, are all to be cured along with the venereal symptoms, and by the very same remedies. 2d. That those scrofulous affections which had existed prior to the appearance of the secondary symptoms (and which of course are in no way connected with them), will not be benefited by a mercurial course instituted for the cure of secondary venereal symptoms; nor will they, or the constitution of the patient, be in anywise injured, provided that the mercurial process be conducted with a reasonable share of skill and judgment.

It may be asked whence, then, has arisen the very general abhorrence of mercury, for the treatment of scrofulous patients when affected with syphilis? I answer, that authors have, one after another, frightened each other, and the profession at large, on this subject; until, at length, it became one of the great boasts of the non-mercurialists to say, that their plan enjoyed this superior advantage—"That, by it, even scrofulous subjects, who could not possibly be treated by mercury for syphilis, could be cured by this plan without any risk of injuring their general health, or of aggravating their scrofulous symptoms." Yet this strange, this almost unaccountable aversion to using mercury with scrofulous patients, does not seem to be felt by the very same practitioners, except in venereal cases. Who, of all these, will hesitate to give mercury, even with the view of exciting pyalism, in a case of iritis, of peritonitis, of synovitis, or of acute inflammation of any other of those membranous tissues, in which mercury has been found so eminently useful? Do we find them very anxious and very particular in their enquiries as to the scrofulous diathesis of a patient labouring under any of these diseases? Do we observe them hesitate for a moment as to the medicine they should prescribe? Even in those cases where the existence of scrofula in the habit is obvious, do we

observe that they feel any peculiar reluctance in prescribing this powerful remedy? No; the dangerous nature of these diseases overpowers every other consideration.

I have no doubt that mercury may be administered, so as to exasperate already existing scrofulous diseases, or even to excite new forms of it; I mean when it is given for a length of time, in what has been termed an alterative manner—viz., in under-doses, such as will not produce the salutary action of mercury (that is ptyalism), but such as will, at length, act upon the system as a slow poison; perhaps, because its influence is only allowed to reach to the nervous system. But I again repeat it, that if mercury be given so as to excite a smart ptyalism in a short time, it will not produce any alarming symptom of scrofula, even though that ptyalism be kept up for such time as may be required for the cure of either primary or secondary symptoms.

We shall next advert to that class of cases in which the patient, who has long been, and who is still affected with scrofulous disease in action, has the misfortune to become the subject of secondary venereal symptoms. Does not this combination, some will exclaim, forbid the use of mercury? will not the result of mercurial treatment in such a case be, that the venereal symptoms will remain uncured, while the scrofulous symptoms will be aggravated to a dangerous degree? Such, I imagine, is the generally received opinion—an opinion, however, which I conceive is rather drawn from theoretical induction than founded on practical observation. For I think I may with confidence appeal to the experience of every surgeon who has had much practice in the venereal disease, and ask him whether he has not treated many scrofulous patients labouring under chronic abscesses and ulceration of the joints; and whether he has not even cured many (who had been lamed by morbus coxæ in childhood) of syphilis, by the use of mercury; and that, too, without being able to discover what he anxiously watched for, and *secretly* dreaded—namely, “that the scrofulous complaints had been made worse by the use of mercury.” Many, I make no doubt, have felt a secret satisfaction at the result; and some, perhaps, have ascribed their success more to chance, or to some peculiar good fortune which has conducted both surgeon and patient with safety through such apprehended danger.

Out of many cases which have occurred in my own practice, I shall adduce a few instances in corroboration of the opinion that such scrofulous habits as those to which I have alluded do safely admit of the judicious use of mercury for the cure of their venereal disease, without prejudice to any scrofulous symptoms with which they may also happen to be affected.

Joseph Bunbury, æt. 26, of a full habit, was admitted into No. 12 ward, on December 5th, 1834. Eight months ago he had a chancre behind the corona glandis, on the right side of the penis, and immediately began to use mercurial pills. He had taken seventy pills before his mouth became affected; this treatment was continued for two months, and then he was considered to be cured;

but, in a month after, he was attacked by pains in his shoulders and arms, and, soon after, a papular eruption showed itself all over his face and body, and his throat became sore. He was received into Sir P. Dunn's hospital, was there salivated, and at the end of three weeks was dismissed, the throat being well, the eruption fading, and the pains much relieved, but a small glandular tumour had formed on each side of his neck; these tumours have very much increased in size, and now these tumours are soft; the skin, covering the most prominent parts of them, is of a purplish red colour, and on each side is a small ulcerated opening, through which a thin pus escapes; the edges of the opening being deeply undermined and thin—he says he had many such tumours in his childhood. His venereal symptoms are several scaly spots in his eyebrows, and red patches on his shoulders, with a slight swelling on each side of the ligamentum patellæ, and severe pains in his shoulders and arms, which prevent him from extending the fore-arms, and keep him awake at night.

I shall briefly state the treatment, by saying that he was purged, and had a tepid bath, before he began to use mercury.

On December the 9th, he was ordered 3ss. ungu. hydr. omni nocte, et pil. hydr. gr. v. bis in die. The pills were omitted on the 16th, and the ointment continued until the 23d. The ointment was resumed on the 30th, and continued until the 10th of January. Again, on the 24th of January, he was directed ungu. hydr. 3ss. omni nocte, et pil. hydr. gr. v. ter in die; this was continued until the 31st, at which time his mouth was again smartly sore. After the 10th of December, he took bark, in one form or other, during his stay in the hospital, from which he was dismissed on the 10th of February, perfectly free from any appearance of venereal disease.

Surely this was a fair case for witnessing the effects of mercury in a scrofulous habit; for we may set down this man as scrofulous, not only from the present swellings and ulcers under the ears, but also from the fact that such had affected him very constantly during his childhood. The result of this treatment, in this case, has been, that the mercury acted rather kindly than otherwise; that his health did not, in the slightest degree, suffer from a very smart action of mercury, kept up for eight and for twelve days, and even then renewed—for he did not lose flesh during his stay in the hospital. With respect to the scrofulous tumours and ulcers, they were not benefited, nor were they in the slightest degree injured by its use. In a word, the mercury here acted as it does whenever it acts kindly; the scrofulous habit did not seem to have the slightest influence on its mode of acting, nor did the mercury seem to exert any pernicious influence on the scrofulous symptoms or diathesis.

Matthew Conner, a delicate-looking boy, æt. 16, was admitted, on the 10th of June, 1834, into the eye ward, on account of venereal iritis in an advanced stage. He had, on each side of his neck, three or four ulcers, covered with yellow scabs. When the scabs were removed by poultices, the ulcers presented all the character of scrofulous ulcers with fungous surfaces. Having satisfied

myself as to the nature of the ulcers, I allowed them to scab again; and during the time of his treatment for iritis they remained untouched. For the cure of the iritis, I employed calomel, in doses of two grains, three times a day, by which a very high degree of ptyalism was induced. During the long period of the ptyalism the scabs remained unaltered in every respect. When the ptyalism had subsided, I again removed the scabs by poultices, and I found the ulcers still retaining the same character and appearance as they had previously to the mercurial course. They did not exhibit any appearance which could lead me to imagine that they had undergone any change during the time of the salivation.

Let us not, then, be too timid when certain diseases, or conditions of disease, require that we should give mercury to a patient, in whom we see scrofula already in action. The safest rule to adopt in such circumstances is, in my judgment, to give it so that it shall, in six or eight days, produce the degree of ptyalism that we wish for. I need scarcely add, that should it be deemed necessary, for the cure of the disease for which mercury is being administered, to keep up a lengthened action of mercury, we should support the system of our scrofulous patient by nourishing diet, by bark, and by opium.

Feb. 1st, 1822. Mr. O. (usher of a school), æt. 26, has been long afflicted with a severe cough, sometimes with hæmoptysis; and is altogether of a very consumptive habit. On February the 1st, he applied to me for cure of a chancre on the inside of the prepuce—this is a genuine Hunterian chancre, and had been discovered only a few days previously.

I advised pil. hyd. 3ss. pulv. ipec. gr. viii. fiant pil. octo. Sumat unam sing. noct.; but, by mistake of the apothecary, he took, according to the label on the pill box, one pill at night, and one in the morning.

Feb. 10th. He states that the pills gripe him occasionally; gums are very sore, those of upper jaw being smartly ulcerated; surface of chancre clean, hardness much less. Omitt. pil. per dies ii. dein i: o. n.

Feb. 13th. Mouth more sore; chancre less hard at base; thinks his cough much improved since he began this course.

Feb. 25th. Mouth sore, upper gum severely ulcerated; scarcely any hardness in the site of the chancre. Repet. pil. i. om. nocte.

March 11th. Has not taken any pills since 3d instant; mouth is only now well; no hardness in the site of the chancre; cured. Acid. sulph. dil. gutt. xv. ter in die.

Remarks.

I felt quite disappointed when Mr. O. told me that he had been taking two pills a day instead of one, as I had directed, for I was tremblingly alive to the danger of using mercury in almost any quantity with him. However, as he had begun with this dose, I

did not like to send him back to a smaller one, fearing that if I did so I should not get the mercury to act favourably hereafter.

This case clearly proves that we may with perfect safety use mercury in small doses, and even excite a smart ptyalism in patients whose lungs must be considered as extremely delicate and tender; and therefore, according to generally received opinions, very ill suited to bear the active use of mercury. Had this been a solitary instance of the safety with which mercury may be given to a patient with hæmoptysis, it might be said that it was an escape and not a cure; but, supported as it is by many other instances in which mercury was with safety and advantage given to those labouring under hectic fever in full action, I have no hesitation in pronouncing it a cure. Should this point be established, that mercury can with safety (provided it be with caution) be given to a patient threatened with hæmoptœ, so as to effect a cure of primary venereal symptoms, I say if this point be once established, it will enable practitioners to hold out to such persons the benefit of this medicine.

At the time that Mr. O. applied to me, I had not satisfactory experience of the safety with which mercury may be given to scrofulous patients; and, therefore, I directed very small doses of this medicine, indeed much below what his system could have borne; but, by the mistake of the apothecary, the dose proved better suited to the existing state of his health, as he was not affected with hectic symptoms. The issue of this case, however, made me reflect more upon this line of practice, and induced me, in subsequent cases of scrofulous patients, to administer mercury with more freedom.

Had Mr. O. been a patient in easy circumstances, I certainly would not, at that period, and with the notions I then entertained of mercury, have preferred a mercurial course. But as his means were extremely limited, depending upon his daily exertions for his daily bread, I knew that he could not procure for himself that ease, and those comforts, which would be required by a different line of practice. These considerations induced me to direct a mercurial course, knowing that this, if it succeeded, was decidedly the shortest line of treatment, and one which would not materially interfere with his occupations.

The result has shown that mercury may be administered to patients subject to hæmoptœ, provided it be given with caution and judgment; and, also, that in such the venereal symptoms yield at least as quickly as they do in those of more robust and more healthy constitutions.

It may naturally be asked, if scrofulous patients be found to bear mercury so well as you represent, how has it come to pass that the profession have so generally entertained the contrary opinion, and have been impressed with a notion that mercury would aggravate all the symptoms of scrofula, while, at the same time, the scrofulous diathesis was so opposed to mercury as to prevent it from exercising its salutary influence, and effecting a cure of the venereal dis-

ease in such habits? To this, I can only answer, that I suppose when men's minds were first instructed that venereal symptoms in certain habits had resisted the power of mercury, and were afterwards cured by sea-air and sea-bathing, they inferred that this was only attributable to a scrofulous diathesis; they, of course, became more guarded and reserved in the administration of mercury to patients of this habit. Hence it followed that they not only prescribed this medicine in smaller doses, but whenever they saw it about to produce ptyalism they withheld it for a time. In a word, that they most cautiously watched it for the purpose of preventing it from acting on the salivary system (its natural and salutary action). By this means, the constitution of the patient came to be irritated, and teased, as it were, by this long-continued use of mercury in under-doses, the medicine accumulating in the system, and not being allowed its natural action and natural outlets, it came to act as a poison on the system; and thus the scrofulous habit (naturally weak) was thrown into disorder, and consequently all its diseases, and tendency to disease, were aggravated. What was considered as an indulgence to the scrofulous habit, ultimately proved to be the source of the principal mischiefs which have been observed when mercury was administered to scrofulous patients.

Let us not, however, consider every instance of enlarged cervical lymphatic glands occurring in venereal patients, either simultaneously with, or subsequently to, the appearance of secondary symptoms, as excited by the influence of venereal virus. For we shall meet with some cases in which this condition of the glands had been produced by the action of the mercury at the time that ptyalism was commencing. That the enlargement of the glands is in such instances caused wholly by the action of the mercury, is proved by the fact that the swelling subsides according as the action of the mercury declines; and that when we again reproduce the ptyalism a second time, the mercurial action having been allowed to subside, we shall find that the swellings will return, and that these can be prevented from increasing in number and size, only by reducing the doses of the mercury, and interposing brisk purgatives pretty liberally. When we thus know the fact that ptyalism is occasionally the cause of this enlargement of the cervical lymphatic glands, we can easily guard against or remedy this occurrence. Whereas, were we to mistake such for scrofulous enlargement excited by the venereal virus, we might be disposed to persist in using the same doses of mercury, under an impression that the former would yield to a little further action of mercury, as some of the venereal symptoms had already begun to do under its use.

I have lately seen two cases of this enlargement of the cervical glands in patients while under treatment for primary symptoms only, and these afford a still further proof that this affection was occasioned solely by the action of mercury on the salivary glands.

CHAPTER XIII.

MINUTE DOSES OF MERCURY IN LATE AND CHRONIC BUBO.

Among those cases of syphilis which can best be treated by very minute doses of mercury, I must mention a rare form of bubo: it is one of an indolent nature; it makes its appearance long after the chancre is healed—perhaps in four or five weeks. The bubo in some cases is single; in others, there is one in each groin: the swelling is not of an acute inflammatory nature, nor is it, during its progress, attended by severe pain, unless it proceed to suppuration, in which case it becomes very painful, particularly if the matter has accumulated largely, and has not got vent. These buboes, to which these remarks apply, are very remarkable for the severe and extraordinary derangement of health which attends them. A high degree of febrile excitement exists, and yet the fever partakes very much of the character of hectic fever: a quick pulse, impaired appetite, urgent thirst, languor and lassitude, emaciation, and night sweats, form its leading features. When, after a tedious suppuration of three or four weeks, the matter gets exit, the pain then diminishes; and, by slow degrees, the health in some measure improves, but a long time elapses before it is perfectly re-established. In some instances, the tumour does not advance to suppuration, but having arrived at a certain size, it remains stationary for a short time, and then slowly retires, but only to a certain degree. For, whether suppuration shall have taken place or not, the groin is not restored to its natural state, and considerable induration of an indolent nature still remains. Such are the symptoms which attend buboes of this class. I have been consulted on cases in which the disease stood at this point for a very long time—of this, the following is an instance.

October 19th, 1835. Mr. K., six months ago, had a chancre on the dorsal aspect of the penis, at the junction of the prepuce with the glans; for this, he was directed, by an eminent surgeon, to use mercurial frictions: he says that he rubbed in nearly one pound of mercurial ointment; and with so much energy that his arms at first became quite muscular. This course he continued for six weeks; during it he lost flesh, and became unable to read, or to attend to any business, but no affection of the mouth was produced. Three months ago he again had sexual intercourse, by which the cicatrix of the original chancre was opened; this has not since healed. About this time a bubo formed in each groin; these were considered, by another eminent surgeon, as constitutional or scrofulous buboes, and therefore they were treated without mercury. During the formation of the buboes, his health suffered materially; he became emaciated, and had night sweats. After this last sexual intercourse, the prepuce became much thickened, especially on its dorsal aspect; this thickening affected the integuments of the penis more than half way towards the pubes. The ulcer, which hitherto

had been confined to the prepuce, has lately shown a disposition to slough, and has stretched forwards, so that now it has laid hold of the corona glandis. To the ulcer, Mr. K. had applied acid. nitric. within the last three days. At present, the prepuce and integuments, half way up the penis, are red, much swollen, and thickened; a hardened and knotted lymphatic vessel runs along the right side of the penis; a considerable hardness and swelling exists in each groin, the integuments are there also red; a trifling discharge takes place from a small opening in each bubo. His health is very much broken down; he is emaciated to an extreme degree; pulse 130; countenance pale and sickly, yet his appetite is good; he has no thirst; has night sweats; sleeps until four o'clock, A. M.; from which hour, until the time he gets out of bed, he is incessantly teased by painful erections.

On the most minute enquiry I cannot discover any secondary symptom. Judging that the original venereal disease was not cured by the very heavy course of mercury which he had undergone, although his system suffered so much by it, I felt no hesitation in recommending mercury, but in very minute doses, which alone could be borne by him in the present depressed state of his health. Accordingly, I advised *ung. hydr. fort. gr. x. omni nocte*; and, at the same time, to drink from half a pint to a pint of sarsaparilla broth daily.

October 22d. The swelling of the prepuce considerably reduced; the ulcer not spreading upon the glans: he says the right bubo is more painful, yet it is scarcely (if at all) more swollen; slept well last night, not having been troubled with erections, but had profuse night sweats; the pulse is still 130; he relishes the sarsaparilla broth. No sensible effect of the mercury, yet he says that he feels himself stronger.

October 26th. The swelling and hardness of the integuments of the penis much reduced; ulcer with a tolerably clean surface—it discharges healthy pus in sufficient quantity; the right bubo, which had been very painful, is easy, and has now three small openings; the hard cord-like lymphatic vessel along the right side of the penis is reducing. He says his health is in every respect much better: he sleeps well; has no night sweats; erections are rare, and not attended with pain; pulse reduced to 108; appetite better than when he was in perfect health; some mercurial fetor indicates a very slight affection of the mouth. *Repet. jusculum sarsæ et ungu. hydr. ad gr. x. per duas noctes, et dein augetur dosis ad ði. sing. nocte.*

I was prevented from watching the further effects of this plan of treatment; nor did I receive any account of the patient until the 20th of December, when Mr. K. informed me, that when he had rubbed scruple doses of the ointment for three times, his mouth became sore; and he continued to use the mercury, so as to keep up the soreness for a fortnight; he then laid aside the mercury. He has taken a great deal of sarsaparilla, and now enjoys tolerable

health. The glands, however, in both groins, are still too large; the penis is healed, with a broad and deep cicatrix behind the base of the glans.

September, 1836. Mr. K., about the time of the last report, relinquished all further treatment; and yet he has not regained his ordinary state of health, although he has been pretty actively engaged in various pursuits, at times living rather freely. He is still very thin, and suffers from irregular pains in his limbs.

In a word, he is not in perfect health; he is teased with the above symptoms, not one of which is decidedly venereal; and yet, all together, they excite in my mind a strong suspicion that something of a latent unsubdued syphilitic taint still remains, which obstructs his restoration to perfect health; yet he declines to follow my advice, viz., that he should again use mercury, beginning with scruple doses of the ointment.

Such are the leading features of this disease when confined to the primary symptoms. But it does not stop here; for unless it be cured at this stage, we shall find that, after some time, a fresh set of symptoms will arise, which, though not strictly secondary venereal symptoms, yet lead us to suppose that they proceed from a certain modified operation of the venereal disease on the general system.

Thus we sometimes observe that the slight improvement in the general health which takes place on the matter of the buboes being discharged does not continue unimpaired for many weeks. The patient now, perhaps, suffers from one or more ulcers on some part of the body or limbs. He tells us that each of these began as a small boil, or pimple, which he scratched; or that it arose from some very trifling hurt. These ulcers seldom exceed in circumference that of a half-crown piece; more frequently they are of a size intermediate between that and a shilling. When fully established, these ulcers exhibit so much of the character of secondary ulcers that almost every surgeon would say they were suspicious looking ulcers. Generally from two to four of these appear, and they are healed very slowly, by means of some active application, for mild ones produce no improvement in them. In other cases no ulcers appear, and the second set of symptoms bear no resemblance to those of the venereal disease; they are such as indicate disturbed health and a broken-down system, and therefore we may expect to find in these an almost endless variety, depending, probably, upon some constitutional predisposition, or excited by some accidental circumstances; they are such as we could not, by viewing them abstractedly, imagine to be syphilitic, and yet, by tracing their history, we are led so directly to the previous venereal disease that we can scarcely doubt their syphilitic origin. The readiness with which they yield to the operation of mercury removes all doubt, and convinces us not only that they arose from a venereal taint, but that they are as quickly and as certainly curable by mercury as the purely secondary venereal symptoms are; and yet these symp-

toms are among those diseases which altogether forbid the use of mercury under ordinary circumstances. Let us take as an example the following case:—

Dr. G., while pursuing his studies at Glasgow, had an ulcer near the frænum, which destroyed that fold; it had been brought to heal chiefly by repeated applications of argentum nitratum. In May following, some weeks after, being in London, a bubo made its appearance in his right groin, and at the same time his health became much deranged, and his strength and flesh were seriously reduced. He applied to one of the most eminent and experienced surgeons in London, who considered his case as one of scrofulous bubo, and accordingly treated him principally with iodine. By his advice he at length removed to Chatham, where, for a time, his general health improved much; but he did not long enjoy this state of good health, for he was then affected with a slight spitting of blood, and cough; some difficulty of breathing quickly followed, and he felt his throat sore. After a little time he became troubled with palpitation of the heart, and along with this a glandular swelling, as large as a plum, took place between the angle of the lower jaw and the chin. Such was the history of his case on 6th Nov., 1835. When he was introduced to me by my friend Mr. White, he had, in addition to a pretty large indurated bubo, the enlargement of the glands under the jaw, palpitation, and quick respiration; he was also affected with extreme quickness of pulse, considerable emaciation, lassitude, and a sickly pallor of countenance. Upon the most mature consideration we agreed to make a trial of minute doses of mercury, in the hope that all his ill health was caused by a latent venereal taint. On Nov. 6th, 1835, we directed for him $\text{ʒss. ungt. hydr. fort. omni nocte.}$

Nov. 24th. Mr. White informs me that he is getting well very fast; the lump under the jaw has declined; his pectoral complaints are much improved; in every respect his health is much better; he still uses the small doses of mercury; he is now to use doses of a scruple each.

Dec. 18th. He now appears much improved in flesh, and he feels himself in excellent health; he is free from cough and difficulty of breathing; very slight remains of the glandular swelling under the jaw; pulse quiet and natural; he has continued the small doses (ʒi.) of ointment, by which his mouth has been slightly affected; he is ordered to repair to Chatham, and is advised to persevere in the use of the small doses of mercury for three weeks longer.

The above histories exhibit to our view buboes or swellings of the inguinal glands under circumstances very different from those in which we commonly contemplate venereal bubo. Thus, in the ordinary venereal disease, bubo appears as an acute glandular inflammation; and, when attended by fever, this is of the inflammatory type. These late buboes, on the contrary, exhibit all the marks of a chronic indolent disease; and these are invariably accompanied by a fever of a purely hectic type.

Perhaps a surgeon, in the whole range of diseases in which he may be called on to practise, cannot meet with any instance in which a true diagnosis is a matter of greater difficulty or of greater importance. It is but too obvious that we cannot place any reliance on the present symptoms. Some information may be gained by applying our attention to the history and treatment of the original primary symptoms, and particularly where these had been treated by mercury. We should carefully enquire as to the manner in which this medicine had acted on the system: and in all such cases, if the ptyalism had not been excited at the regular period, and kept up for a fair length of time, then I would strongly incline to the opinion that all the present symptoms arose from a syphilitic source.

On collating together the history of several of these chronic venereal buboes, with that indolent constitutional bubo which I originally described in a paper in the Dublin Hospital Reports, vol. ii., it will be seen that the local conditions of the groin very closely correspond with each other; and that the constitutional symptoms of the one cannot be distinguished from those of the other. Yet in practice no more serious error could be made than that of mistaking and of treating the one for the other. For were we to treat by the ordinary mercurial process as venereal the constitutional bubo with its accompanying symptoms, we should exasperate all the complaints, inflict a severe injury on the health of the patient, and even endanger his life. While, if we treated a chronic venereal bubo as a mere constitutional swelling of the inguinal lymphatic glands, we should only employ an imbecile useless line of practice, leaving the cause and the root of the disease untouched, allowing it to pursue its course unopposed, until it terminated, as it generally will do, in a slow death, except in some cases, where a peculiar innate strength of constitution may enable the system to produce the development of some one or two well-marked symptoms of syphilis. In confirmation of these assertions, we find that one of these cases had been mistaken by a surgeon of the highest character in the united kingdom. If we indulge a hope that we shall be able to distinguish the venereal from the indolent constitutional bubo, we must rest it on our scrutinising with most scrupulous minuteness the history of each case. By so doing we may, in a few instances, acquire a well-founded confidence in our diagnosis; but in the majority of cases we shall find the history involved in the utmost perplexity and uncertainty. I trust, however, that I have now directed the attention to a perfectly safe and generally an efficient test by which our doubts may in a great degree be dispelled, and by which our practice may be guided in a safe and satisfactory manner. It is merely to employ mercury in very small doses, ex. gr. ten grains of the ointment once a day,—by employing this test in cases which are venereal we shall enjoy the satisfaction of seeing some improvement in the constitutional symptoms, as also some amendment in the general health in the course of five or six days, before any mercurial effect can be discerned; and those favourable changes will become more and more manifest, in proportion as the salivary

system comes under the influence of the mercury. Should we have employed the same test in a case of purely constitutional indolent bubo, we shall find, on the contrary, that no amendment takes place within the first six or eight days, but that even when the mercury acts on the mouth the symptoms are rather aggravated.

This plan of employing those minute doses of mercury can, therefore, lay claim to the double merit of being the most speedy as well as the safest method of treating all venereal symptoms, whether primary or secondary, when attended with hectic fever; and also of affording the most certain, and the only safe criterion, by which we can decide in doubtful cases which are attended with hectic, whether the disease be venereal or not.

Were we to employ, as a test, mercury in doses such as are employed ordinarily in the treatment of the venereal disease, we should inevitably injure the patient, and at the same time we should not obtain the smallest insight into the nature of the disease; for mercury used in such doses with a patient in this state of debility and hectic fever would rather overpower the system than produce any improvement in the venereal symptoms.

One word more on the subject of these buboes and their accompanying symptoms. Here is a modification of symptoms of syphilis and its consequences, which we are utterly at a loss to account for; the natural habit and previous state of health will not explain it; nor do we acquire any real insight into the cause by referring it to the treatment of the primary symptoms; for in one of the cases I have related mercury was used in full doses, and for a very sufficient length of time, while in the other no mercury at all was employed. And I recollect other cases in which the patients used only a few mercurial pills for eight or ten days, without any sensible mercurial action being induced. If in the case of Dr. G. we embrace the opinion that the venereal disease had been modified by the constitution, we shall be fully as much justified in supposing that in Mr. K.'s case the overpowering doses of mercury induced the extraordinary deviation from the regular course of the venereal disease.

CHAPTER XIV.

SYPHILIS IN INFANTS.

Perhaps there is not, in the entire range of surgical diseases, any one the contemplation of which is more calculated to arrest our attention, or to excite our interest, than syphilis infantum. Whether we enquire into the circumstances under which the diseased parent or parents can infect their offspring, or the form in which the disease affects the infant, or the appearance and nature of those

diseases which are communicated by the infant to the nurse, or of those communicated to its other attendants, and the further propagation of disease by the nurse to her husband, and perhaps to a large family of children ; I say, in investigating any one of these points, we must be struck with the fact that we find in each a striking deviation from those laws which regulate the venereal disease as communicated by the adult to the adult. Indeed this is so much the case, that some authors have not hesitated altogether to deny that these affections were venereal ; while others, admitting the possibility of a venereal disease in infants, have yet made use of those very deviations from the regular laws of syphilis, to prove that in particular instances the disease was not venereal, because it did not strictly square with the progress of syphilis in adults.

Before I enter upon the subject of syphilis in infants, I must state a fact which, though I am unable to explain it, has yet been forced upon my observation by more than five or six instances ; namely, that a newly married man, who is himself free from every appearance of syphilis and every other disease, shall yet infect his wife in such a manner that secondary symptoms shall appear in her in a few months after marriage, and these not preceded by any primary symptoms, or by any discharge whatever from the genitals. And although among these secondary symptoms some raised ulcers shall fix upon the external pudenda of the wife, yet the husband shall very rarely suffer in any manner from these. The husband, when questioned, will admit that at some period within nine months antecedent to his marriage, he had contracted a venereal disease—that he had undergone mercurial treatment, by which all his symptoms were removed, and that he had been declared by his surgeon to have been cured. I am well aware that such reports cannot always be relied on ; and as long as such cases were confined to mechanics and persons in an humble rank of life, I could not bring myself to believe implicitly in their reports ; but when I found some occurring in the higher walks of life, and when the husbands proved to be men of acknowledged and known veracity, I could no longer withhold my assent. I now mention one case, of the truth of which I am perfectly convinced, and which is, besides, one of the very few instances in which the husband seemed to suffer from the diseased state of the wife.

January, 1828. In two months after her marriage, Mrs. K. first noticed certain unnatural appearances on the labia externa. Having, after another month, obtained an examination, I found a number of white moist raised tubercles on the internal surface of each labium pudendum. At this time she was also affected with white superficial ulceration or excoriation at both angles of the lips. The tonsils appeared with whitened surfaces, the snail-track affection of the mucous membrane, a deep copperish hue of the skin at the junction of the *alæ nasi* with the cheeks. Upon the most minute enquiry I could not discover any grounds for supposing that Mrs. K. had at any time been affected with primary symptoms.

At this time Mr. K. had not the slightest trace of any local or

constitutional disease. About ten months before marriage he had undergone a full and regular course of mercury for primary symptoms, and was then assured by his surgeon that he was perfectly cured. Since that period he had remained free from all appearances or suspicions of venereal disease.

However difficult it was to account for these appearances, I considered them to be venereal, and accordingly put both husband and wife under a course of mercury. For although he did not exhibit the slightest trace of disease, yet it was quite certain that from him Mrs. K. received her complaints. By the use of blue pill her mouth was made smartly sore in the course of three weeks; yet at this period the symptoms on the pudenda were not improved as much as I thought they should have been in that time, and they afterwards appeared to yield rather to a lotion of sulph. zinc than to the action of mercury. All the other symptoms were removed solely by the influence of the mercury. This course was continued for eight weeks.

His mouth was with difficulty affected; however, about the middle of the fifth week it became slightly sore, and this effect was continued until the conclusion of the treatment. In the beginning of April they returned to the country, where they both used sarsaparilla for six weeks following. When they had been at home for three months, Mrs. K. perceived a few blotches in the skin of the palms of the hands, a few also on the forehead near the roots of the hair, and some over the scalp; on the dorsum of the tongue there now is a small patch destitute of papillæ, and looking as if it had been scalded. Fresh appearances have also taken place on the pudenda. From these she suffers no uneasiness whatever; no discharge. They consist of a number of small raised brown-coloured excrescences covered with a firm cuticle.

Mr. K. now told me that he was strangely affected; for that about six weeks ago he observed some strange appearances on his penis. I found, on the inside of the peuce, a brown blotch of a rounded form, and a similar one of a much larger size, and of oblong form, raised and with a rough surface on the skin of the penis.

I now commenced another course of mercury, which was carried on for ten weeks, and which proved more satisfactory than the former; for now, in Mrs. K., all the symptoms yielded kindly as the ptyalism proceeded; and Mr. K. was without much difficulty brought under the influence of mercury, and the brown blotches yielded in the same manner as venereal symptoms usually do.

Some authors, with a view to make facts reconcileable to their theories, have supposed that the infant could only be infected by coming in contact during parturition with ulcers in the vagina of the mother. This doctrine is at once overthrown by the following facts:—1st. By having ascertained by observation that no such ulcers were in existence at the period of parturition; and, 2dly. That many infants have exhibited the symptoms of the disease actually existing at the moment of their birth.

Many of those who admit that the fœtus in utero can be infected,

suppose that this takes place only when one or both parents have been affected with primary or secondary symptoms at the time of conception, or that the mother has been so affected during utero-gestation; and to this opinion I believe the majority of experienced practitioners, urged by repeated observation, now give their assent, however irreconcilable the fact may be with their theoretical notions of the ordinary mode of propagation of the venereal disease.

But there are cases in which the fœtus in utero has been infected under circumstances so strange and so difficult to explain, that nothing short of actual observation could induce us to allow the fact. The circumstances to which I allude are these:—The father of the child has had primary symptoms six or eight months before his marriage; for these he has been treated by mercury; has undergone a full course of this medicine, under which his symptoms have been removed; and his surgeon has declared himself satisfied with the treatment, and dismissed him as perfectly cured. In six or eight months after this treatment he marries. In the ordinary time his wife becomes pregnant, and carries the child until the seventh or eighth month, when abortion takes place, and this without being preceded by any of those circumstances which in ordinary contribute to its occurrence. The same fatality attends on the second and third, and perhaps fourth pregnancy, in spite of every attention paid to the directions of her accoucheur. At length suspicion arises in the mind of the accoucheur; he examines the product of the next abortion, and finds that the cuticle is loose, and that it readily peels off in patches of greater or less extent; thus is explained what the midwife had termed a putrid state of the child; he may find too that the nails are not formed, and in general that the child appears as if it had been badly nourished. It should be here remarked that sometimes the child is produced alive, in such a weakly but emaciated state that it does not survive more than a few hours; and such often bear unequivocal marks of the venereal disease. Until these repeated abortions shall have attracted the attention of the accoucheur, there has not been any one circumstance which could have raised his suspicion as to the true cause of them. For both parents continue, all this time, to live in the enjoyment of perfect health; no trace of disease is to be discovered in either. When the husband is questioned, he candidly avows that he had before marriage been affected with primary symptoms; that he had been (as he thought) cured of them, and that having allowed six or eight months to pass over before his marriage, without perceiving any sign of a return of the disease, he had concluded that it had been perfectly eradicated from his system. On further enquiry it is ascertained, that his wife had never complained of any sensations which might lead even to a suspicion of her having had primary symptoms; nor has any appearance taken place in her, which can even bear a resemblance to secondary symptoms. In a word, both parents are pronounced (after the most minute investigation) to be in the enjoyment of perfect health.

In some cases, we may discover equivocal appearances of disease

in the father, yet so faintly resembling syphilitic symptoms that we could not think of considering them as venereal, unless our suspicions came to be strengthened by some collateral circumstances. Of this kind is one of those cases related by the late Dr. Beatty, of this city, in his paper entitled—"On a species of premature labour," published in the fourth volume of "The Transactions of the Association of the King and Queen's College of Physicians."

Dr. Beatty having concluded the history of one case of this kind, says, "Several similar cases occurred to me from that time, with similar success, which I shall pass over, as they rest only on my own experience, and shall therefore confine myself to a very few, in some of which I was assisted by Mr. Colles and Mr. Todd, in their capacity of surgeons. In my case-book, to which I have referred, I find that, in August, 1812, I attended the wife of a stay-maker, who was delivered of a putrid child, in the seventh or eighth month, which she said was the third that she had born dead. I discovered so much of venereal affection as to recommend that they should put themselves under the care of some experienced surgeon, for the use of mercury. They applied to Mr. Colles; and, when she was pregnant in the following year, Mr. Colles told me that they had not continued a sufficient time under his direction, to satisfy him that they were cured of their venereal complaints; which I found to be the case in July, 1813, when I delivered her again of a putrid child, in the eighth month. I then declared, that I never would attend her again, until Mr. Colles told me that he was satisfied with the result of the mercury used. They again returned to him; and fully attending to his directions, in October, 1814, I again attended her, when she bore a living girl, at the full period of gestation. She has had several living children since."

I can recollect that the symptoms exhibited by the husband were of such a very doubtful nature that I should not have thought of treating them as venereal, were it not for the communication made to me by Dr. Beatty, with respect to the abortions of his wife.

Although in this case there was enough in the appearance to allow us to connect them with a preceding venereal complaint, yet Dr. Beatty's experience had informed him that similar unfortunate results might have taken place, where no visible symptoms of venereal disease could be discovered in either parent, for his next case, which was treated by him and the late lamented Mr. Todd, was of this description.

In a few instances the child comes to its full time, or nearly so, but is born in such a weakly state that it ceases to live in a few hours. This infant exhibits unequivocal marks of venereal disease, in the copper-coloured eruption which is always to be seen about the anus and genital organs, and which is often spread over the entire surface of the body. The countenance of such a child generally exhibits somewhat the appearance of extreme old age.

But the manner in which I believe the syphilis of infants more generally makes its appearance is this—the child is born, to all appearance, healthy and well-nourished, and continues apparently

in good health for a period varying from eight days to as many weeks; then a number of copper-coloured spots appear about the anus and genitals, on the inside of the thighs, corresponding to the external genital organs; these sometimes spread along the groins, and degenerate into ulcers. The voice of the child is now observed to change: it has a peculiarly hoarse cry. Superficial ulcers next appear at the angles of the mouth; these sometimes affect more particularly the mucous membrane of the mouth; sometimes they occupy rather the external skin, and when this is the case, we find the cracks or fissures made to bleed by the stretching of the skin whenever the child cries. The tongue, palate, and throat, also are affected with those white and very superficial ulcerations which authors have denominated aphthous. The nose too begins to be more or less obstructed; a sharp thin discharge flows from the nostrils, and seems to irritate (if it does not excoriate) the adjoining skin; this discharge occasionally dries, and forms a hardened crust at the opening of the nostrils; which, by obstructing the breathing, seems to add considerably to the sufferings of the child. If the disease be allowed to proceed, we find the ulcers or fissures in various folds of the skin, ex. gr. between the chin and throat, on the back of the neck, in the folds on the back of the thighs—in a word, in any or every one of the folds of the skin. The voice of the child soon adds another symptom very characteristic of the disease; the cry of the child becomes hoarse and raucous to an extreme degree. The child then begins to emaciate, the skin becomes flabby, and unless active treatment be employed, the unfortunate sufferer dies extenuated and exhausted. Very frequently a number of the lymphatic glands become enlarged, which older authors have improperly termed buboes. The glands of the neck, and those on the occiput, suffer in this manner, especially when the eruption forms a crusty covering on the scalp; indeed every where on the surface are the lymphatic glands occasionally liable to be thus affected. But there is nothing in this enlargement to be compared to the inflammatory enlargement of these glands in the buboes of adults; on the contrary, they remain perfectly free from the condition of active inflammation, although some of them often undergo a sort of slow suppuration and ulceration, similar to those processes in scrofulous glands. These changes in the glands, when they do occur, take place only in the last stages of the disease.

It deserves to be mentioned, that some infected infants (in addition to the other symptoms) have a muco-purulent discharge from the eyes. This is in such quantity as scarcely to overflow the eyelids, and is accompanied with only a very slight redness of the tunica conjunctiva. It bears no resemblance to the purulent ophthalmia of infants, which latter (I need scarcely add) is not a symptom of syphilis. My limited observation does not furnish me with a single instance of purulent ophthalmia, in conjunction with truly syphilitic symptoms.

The unfortunate victims of this disease generally perish apparently worn out by marasmus. In a few some spots of the eruption,

or some of the glandular swellings, degenerate into ulcers, which, becoming irritable and painful, add severely to the sufferings, and hasten the death of the patient. But in no instance do we observe those destructive processes of ulceration by which portions of the throat or nose are carried away; nor do we see those frightful affections of the bones, which too often attend the other symptoms of secondary syphilis in adults.

Let it not be supposed that we are to meet with all the above symptoms affecting every infected child: scarcely ever are they all combined, nor indeed is there any regular order in which they necessarily appear. In some cases, the first indication of the disease is a hoarseness or a snuffling; and in such the throat or the nose exhibits the first traces of the disease. More frequently the eruption about the anus and genitals is first in appearing; but this remarkable phenomenon we may expect invariably to witness, viz. that when the throat is first affected we may expect shortly to see the affection of the anus, and vice versa.

I shall only further add, that sometimes the copper-coloured eruption is most remarkable at the fold between the lip and chin, or below the chin, and on the fore part of the neck; a coppery hue, along the joining of the lip and nose, is also often a very characteristic symptom of this infection.

There is still another manner in which the infant may receive the infection, viz. by sucking a nurse affected with secondary symptoms of syphilis; but I am in doubt whether the diseased nurse could infect the child, unless she had an ulceration of the nipple—I cannot at this moment recollect an instance. The following case, which has been very lately under my care, is an instance of the infection being communicated to the infant, the nurse having, at the same time, an ulcerated nipple.

Esther Warren, æt. 29, admitted into the 9th ward, 23d of February, 1836, under Mr. Colles.

In September last, this woman, then nursing the child at present at her breast, and having more milk than it could use, was induced to suckle another infant, and continued to do so until it died at the end of three weeks. The manner of its death, and the state of its body, as related by the woman, leave no doubt that this infant had been affected with syphilis. Previous to her reception of this child, she and her own infant (then four months old) were in perfect health;—about the time of the death of the strange infant, a sore appeared on her breast, near to the nipple; and not long afterwards an eruption occurred over various parts of her body, preceded by the customary febrile symptoms. Not being aware of the nature of her illness, she did not apply for medical advice; and she has remained, up to the present time, without treatment; the eruption fading in one place, and then reappearing in another. In the mean time her health began to decline; her appetite failed her; she was troubled with night perspirations; and, from a previous state of health and strength, she soon became weakly and emaciated. Her throat, also, has latterly become affected; it presents a deep red

appearance, but there is no ulceration to be seen ; the angles of her mouth are also affected by fissures : at this period of her complaint, seeing that matters were going on from bad to worse, she determined on coming into the hospital. She has had but one other child, now two years of age, stout and healthy. The infant, now ten months old, is not at all emaciated, but of a pale and rather sickly appearance. Several parts of its body are covered by a copper-coloured eruption, slightly raised and smooth ; this particularly affects the parts of generation and the neck : it became affected nearly at the same time with the mother.

Mercury was administered to both the mother and child ; and they were dismissed cured in the course of some weeks.

I shall now mention the outlines of a case which proves that the dry nurse (if labouring under syphilis) may infect an infant committed to her care.

My friend Mr. Cusack says, "The child of A. B., a year and a half old, was brought to me with small superficial ulcerations about the nates ; the dry nurse, whom I examined, was at the time perfectly free from any disease. Before the expiration of three weeks, the nurse again called on me, and showed me an inflamed spot, about the size of a sixpence, just over the dorsum of the metacarpal bone of the thumb. From the previous affection of the child, I was induced to suppose it venereal, and accordingly received her into the hospital. I placed her under the influence of mercury, but this did not prevent the occurrence of secondary symptoms, for she subsequently suffered from pains of her limbs, general copper-coloured eruption, ulcers in her throat, and iritis. During her residence in the hospital, the cook from the same family was admitted, labouring under very similar symptoms. On enquiry, I ascertained that the cook had originally infected the child, and the child had contaminated the dry nurse." I shall extract from the hospital registry an account of these two cases.

Mary Margrane, æt. 36, dry nurse, married, and mother of several healthy children, admitted into No. 9 ward, on the 21st of January, 1834, under the care of Mr. Cusack.

About four months ago, a pimple appeared on the dorsum of the metacarpal bone of the thumb, which being frequently rubbed off, was converted into a circular ulcer, which was accompanied with a slight eruption on the fore-arm. She did not suffer any constitutional disturbance. When she had the pimple on the hand, she was in the habit of washing a delicate child, affected for some months previously with sore eyes, and an ulcer on the buttock. The child had been weaned for five months. The ulcer on the buttock of the child was healed by the use of black wash. On the 15th of November, 1833, Margrane was admitted for the first time into the hospital ; she had then a circular sore on the hand, and a slight eruption on the fore-arm. On the 25th of November she was ordered pil. hyd. gr. v. bis in die, which she continued to take till the 9th of December, when, being apparently quite well, she left the hospital, but without being salivated. In about a month after-

wards, a scaly eruption appeared on the face, unpreceded by constitutional symptoms.

January 21st. She was admitted a second time; and the eruption, which was of a scaly kind, had not extended to any other part. N. B. Was examined by Mr. Cusack, and no appearance of ulcer on the genital organs. R. hyd. oxym. gr. $\frac{1}{4}$, c. decoct. sarsæ.

March 10th. Has continued the same medicines to the present time; is now free from the eruption, but still there is some slight discoloration; is made an external patient, and to continue medicine. N. B. She continues in good health.

Mary O'Donnell, æt. 30, cook in the same family with Margrane, admitted into No. 8, on the 25th of January, 1834, under the care of Mr. Cusack. She always enjoyed good health until the end of October last, when an eruption came out all over the body, preceded by pains in the bones, palpitations of the heart, loss of appetite, nausea, and thirst. Says she had previously no ulcer in, or discharge from, the vagina; but the child, mentioned in the preceding case, was usually left in her bed during the day. She got some cathartic pills and woods from a dispensary, during the use of which the general symptoms subsided, and the eruption was fading away; when, having caught cold, a fresh eruption came out, about last Christmas: she has taken no medicine since.

January 25th. Scaly eruption, of the same character as Margrane's, all over the body; pains in the bones occasionally at night; tongue clean, pulse regular, appetite good. Decoct. guaiaci, pil. purg.

February 3d. No fresh spots have come out; the eruption has ceased to desquamate. R. hyd. oxym. gr. $\frac{1}{4}$, c. decoct. sarsæ.

February 24th. Eruption gradually declining; left the hospital, and was desired to continue her medicine.

Of course we cannot say whether the infant was infected by the primary or the secondary symptoms of the cook.

I had an opportunity of seeing these two women when in the hospital, and I considered their diseases to be most unequivocally syphilis.

Here then are two clear examples to establish the opinion that secondary symptoms are capable of propagating the venereal disease; for, in this case, no suspicion whatever arose in the minds of any of the medical attendants that the disease of the child had been derived from the parents; indeed the advanced age of the child at the time that it first exhibited any signs of the disease, was quite sufficient to remove all doubt or suspicion on that head.

In cases of so much danger, and so much delicacy, it is a matter of the first importance to form a correct diagnosis. No man would be so rash as to be decided in his judgment by any single symptom, however strongly it may be marked. Every circumstance which can throw any light upon the subject must be taken into the account, viz: the history of the father's health previously to his marriage, the frequent abortions, the appearances of the expelled fœtus

(if these can be discovered), the present symptoms, their succession and combination.

We sometimes meet with an infant having numerous spots of moist button-scurvy about the anus, genitals, and inside of the thighs. Should other members, also, of the family exhibit similar symptoms, we are not in much danger of mistaking these for syphilis; because a slight attention to the history of each case, and to the marked difference in the more grown subjects, between button-scurvy and syphilis, will at once enable us to decide; but where the infant is the only member of the family so affected, we are liable to commit a mistake if we form a hasty opinion. A little attention will enable us to decide correctly; for although the anus and external organs of generation, may present appearances pretty closely resembling those of syphilis, yet we shall be able to distinguish these from the latter, by observing that they are raised above the surface, that they are most distinct and distant from each other; and while those in syphilis begin with a number of blotches pretty thickly set, these enlarge a little, and then ulcerate, without being at any time raised above the sound skin.

An eruption of a few copper-coloured spots is not unfrequently seen about the anus and genitals of infants; otherwise perfectly healthy—these we must not hastily pronounce to be venereal; they are sometimes caused by inattention to cleanliness, and sometimes by a disordered state of the alimentary canal. But these spots remain the single symptom; this disease is not found to make progress—it does not show itself in the mouth or throat, or on other parts of the body, and it soon yields to persevering cleanliness, and a regulated condition of the alimentary canal.

The anus of infants is subject to fissure, which, beginning on the skin, extends in upon the mucous membrane of the rectum. We know that such is no venereal, when we find it remain a single and solitary symptom; this yields to black wash, and ordinary local treatment.

A superficial ulcer is sometimes found on the rugous skin of the anus; generally with one part of the edge rather deep, the rest of the edge thin. This ulcer is not very painful; it is indolent, and sometimes continues for many weeks or months, the general health of the child remaining unimpaired. Strict attention to keeping this ulcer constantly covered with some stimulating application will effect its cure in a very moderate time.

It is asserted by many authors, that this disease in the infant at the breast may be most safely and very certainly cured, by subjecting the nurse to a full and regular course of mercury. This, no doubt, is true in many instances; but not a few cases are reported to have required, in addition, that the child itself should be subjected to mercurial treatment. In my opinion the cure, if not more certain, will be more speedy by subjecting both nurse and infant to the use of mercury. Indeed, in some instances, it is absolutely necessary to give mercury to the infant, as well as to the nurse, as in the following case:

Eliza Redmond, *æt.* 35, an unhealthy looking woman, of spare make and dark complexion, with her child (aged five months and a half), admitted into No. 7 ward, under Mr. Colles, September 3d, 1836, gives the following history of herself.

She lives in the country, and was married in November, 1832; she states that in seven weeks afterwards she perceived a sore on the right labium pudendum, which spread to the size of a sixpence, accompanied with ardor urinæ, and a discharge per vaginam, great heat, and swelling of the parts. For this she took seven pills; her mouth became sore, and she discontinued the medicine. She was not aware of her husband having any sore, but he also took pills, and was similarly affected. On salivation being produced in her, the sore healed, and all her other symptoms disappeared, except a slight discharge. In two months from the date of the sore healing, an eruption broke out on *both* herself and her husband; this was attended with pains in the large joints, particularly the shoulders and ankles. The eruption continued, off and on, for five or six weeks, but finally disappeared without her taking any medicine, but leaving her much broken in health. The husband's symptoms went off similarly.

In June, 1833, she states, that a sore appeared on the same place, and of the same character with the first, attended by gonorrhœa, &c. &c. She again had recourse to the pills; took six, and being exposed to much cold, a profuse salivation was produced. The husband also took pills. Her sore healed, and the discharge gradually went off; but she complained of general ill health, with loss of appetite, and occasional pains at night. No eruption or sore throat followed this attack, in either herself or husband. With these symptoms she went on to the period of her becoming pregnant (in the summer of 1835), the first time since her marriage. About the eleventh week she miscarried; caused, she supposes, by fright. There was no fœtus, or marks of putrescence of the fœtus.

On the 20th of March, 1836, she was confined of this child, a girl, which she suckled herself; healthy to all appearance, and it remained so till the ninth week, when she perceived a number of copper-coloured spots, the size of from a pea to a sixpence, on the neck, face, and body of the child; these symptoms were attended with fits of screeching, and a remarkable alteration in the voice. In twelve days from this, the child getting worse, she applied for advice; got pills, seven of which affected her mouth. The child at this time improved a little; it got no internal medicine, but had medicated baths. Shortly after this, the child's mouth became sore at the angles, and along the red margin of the lips, appearing first in the form of whitish blisters, running into one another, and afterwards extending to the inside of the mouth; the spots gradually disappearing, the voice and mouth remaining much the same. The child sucked well.

June, 1836. About three months ago sores began to appear on the pudendum of the infant, cleft of the nates, and the angles of the body generally, coming on in the latter places in the form of

fissures. The child's health became much worse; it was much wasted, and constantly crying.

August. Three weeks ago she came to town; and, under the care of a surgeon, took ten pills, and eight rubbings, herself; the child received no treatment, and evidently became worse: the mercury did not affect the mother.

September 3d. Came into the hospital; child is extremely emaciated and weak, has a pale sickly look, its eyes dull and heavy, takes no notice of any thing, is constantly crying—in a word, is in a deplorable and almost hopeless state; its voice is of that peculiar croaking hoarseness, characteristic of its state, and its whole aspect bespeaking disease; its lips, and the mucous membrane of its mouth and tongue, are covered with white spots, and small superficial ulcers interspersed; at the angles of the mouth are superficial ulcers with white margins; at the cleft of the nates, opposite the front of the coxæ, and not engaging the anus, there are two ulcers; their edges are red and well defined, in the centre of each there is a small spot, about the size of a pea, standing up like an island, unaffected by the disease. The rest of the sore is covered over with a layer of grayish-white tenacious matter, without any appearance of pus; the whole of the ulcer lies beneath the surrounding integument. There is an ulcer of similar character, but not so marked, across the throat; also, in each hand; and the marks of others in the folds of the skin of the thighs; one on the pudenda is healed; there are also slightly discoloured marks of the spots on different parts of the body, but no appearance of desquamation.

The mother has no symptoms of disease, except slight wandering pains, and general weakness; her nipples are perfectly sound, and have not been at any time sore. She was ordered, on September the 3d, calomel gr. ij. opii gr. $\frac{1}{4}$, bis in die; and the child, pil. hydr. gr. ij. in syrapi 3i. bis in die; and black wash to all the sores.

September 8th. The mercury has disagreed with the mother, and caused a purging; it was discontinued, and she had an oil-draught. The child is greatly improved since its admission; it is more lively, takes more notice, its eyes have lost the dull look, its voice is much improved, its cries less, and when it does, it is much stronger than before. The sores are all better, and those about the anus are losing the elevated margin, and have thrown off the white tenacious coating; are clean red, and the surface is coming on a level with the skin; that on the neck is nearly healed: the mouth is cleaner,—the white coating has peeled off, the ulcers are healed, leaving the tongue redder than before. It sucks and sleeps well; ordered to continue the pil. hydr. and the wash. The mercury has not been resumed with the mother; she complains of weakness, and loss of rest and appetite; mouth slightly sore. Ordered a gargle, and cardiac mixture.

September 11th. Mother much the same; child continues to improve; the mouth better, and the sore contracting and healing both from the edges and the central sound spot.

She is not aware of her husband having any symptoms of disease since June, 1833.

This case pretty clearly proved that mercurial treatment of the mother was not sufficient to cure the infant; for while the mother was treated by a surgeon in Dublin with mercury, (no medicine being, at the same time, administered to the child,) the latter was not at all benefited; indeed its state was all but hopeless on its admission into the hospital. Again, when the child was put upon mercury, it rapidly improved; although, at this time, the mercury had not made any salutary impression on the system of the mother; indeed, it had acted on her, at this time, rather as a poison. Vide Report of September 8th.

The ulcer near the anus of the infant resembled, in a degree, the secondary ulcer of an adult, when it is about to heal; for we often find the latter to heal in the centre, while the edges show no disposition to do so. I merely notice this fact, because I think we cannot be too particular in noticing every fact in those diseases which are not well understood; and I imagine that we are as yet but little acquainted with the syphilis of infants.

It is unnecessary to enter into particular rules as to the treatment of the nurse; this must be conducted as in ordinary cases of secondary syphilis.

For the child we may employ either the ungu. hydr. in very minute doses, gr. v., or gr. iij. semel in die; or pil. hydr. gr. ij. may be given daily, suspended in mucilage; or we may give calomel, gr. ʒ, combined with sugar, once or twice a day.

It is quite in vain that we look to the state of the mouth and gums, as an index to point out the action of the mercury on the child's system. No man, in the present day, requires to be told that mercury never does produce ptyalism, or swelling and ulceration of the gums in infants. The morbid affection of the mouth and throat may be attended with profuse flow of saliva, before any mercury is employed; but this excessive flow is actually found to decline in proportion as the medicine acts in a kindly manner on the system. We have no better proof of the wholesome and efficient action of mercury on the system of the child, than our witnessing an improvement in the condition of the symptoms, especially of those which are not treated by any topical applications. When the mercury begins to act, the bowels may be deranged, or even dysenterically affected; but I have not yet seen any instance of mercurial erythema in an infant. In one case, which I was treating with frictions of mercurial ointment, on the second day of visible amendment of the symptoms the child was seized with a convulsive fit, in which it expired. I ascribed the death, in this case, to the first impulse of mercury upon a highly sensitive system, for I could not discover any other probable cause of it.

The amendment, once begun, proceeds with greater rapidity than we observe in cases of similar symptoms in the adult.

Here, as in adults, the disappearance of symptoms is not always the cure of the disease; for it occasionally happens that the

symptoms return after an interval of one or two months, and require us to resort again to the use of mercury.

In some cases we see one symptom linger for weeks, and even months, after all the rest have disappeared; and this, although such symptoms may enjoy the additional advantage of a topical application. This remnant of a solitary symptom would seem to be merely a local affection; for it may be removed by changing the topical remedy for another possessed of similar qualities, though perhaps not of superior activity. I believe that, under these circumstances, we need not resume the use of mercury.

From the commencement of the treatment we employ topical remedies for the relief of the external ulcerations, wherever seated; those around the genitals and anus imperatively demand them, as they add so severely to the sufferings of the patient. The black wash will be found of inestimable value; it soothes the irritability of the ulcers, and improves their appearance and condition, even before the mercury can have acted on the system. When a larger spot of ulceration at the anus proves obstinate, and seems stationary, even after all the other symptoms have disappeared, we should then apply some other topical means—perhaps the ung. hyd. nitr. one part, with eight parts of lard, will then be a good substitute for the black wash. I am not acquainted with any remedy which can be with advantage applied to the ulcers of the lips, palate, and throat; the very act of applying any thing to these irritates the ulcers, and causes them to bleed, so that I have imagined they did fully as much harm as good; and, on that account, I have long since relinquished their use altogether. I am not aware of any local treatment for the swellings of the enlarged lymphatic glands; they yield readily to the constitutional influence of mercury. The slight purulent discharge of the eyes is benefited by a mildly astringent collyrium.

Should the parents, from ignorance of the nature of the disease, have wasted time in unavailing efforts to cure it, and have allowed the child to be so far reduced that a diarrhœa has set in, and the countenance has assumed that confirmed appearance of old age, we must consider the case as in the last degree dangerous; however, by using the ordinary means to check this discharge, while at the same time we use our best efforts to bring the system under the influence of mercury, we afford some chance of life to the unhappy little sufferer.

The Appearance and Nature of those Diseases which are communicated by the Infant to the Nurse.

In some days, or at least in a very few weeks, after the nurse has observed the venereal symptoms appear on the child, her sufferings commence. She is first affected with what she terms a sore nipple. On enquiry it will be found that one or two pimples, or pustules, have appeared near the nipple; these soon degenerate into an ulcer, which presents the characters of a secondary rather than of a pri-

mary venereal ulcer; this becomes exquisitely sensitive. A slight enlargement and tenderness of some of the axillary glands quickly follow, but these glands do not betray any strong tendency to run into suppuration; on the contrary, I must say that I have not seen one single instance in which this occurred. In two or three weeks more the nurse complains of sore throat, or of an eruption; and not unfrequently these two symptoms appear almost simultaneously. An eye accustomed to view the secondary symptoms of syphilis does not discover any difference between these and the venereal sore throat and eruption which follow a primary ulcer in the adult. The pudenda of the infected nurse are very generally beset with small raised ulcers which discharge copiously—these are to be seen perhaps in every case where a general eruption of the skin exists, but not unfrequently they may be found accompanying the superficial white ulceration of the throat where no general eruption exists, and where the skin remains free from a general venereal eruption. I have occasionally seen venereal iritis also attack the nurse. What other symptoms might arise, or what course the disease would follow, if longer unattended to, I cannot pretend to say, because I have scarcely ever seen any case in which the course of symptoms might not have been disturbed and deranged by the exhibition of mercury. But many of those infected nurses to whom mercury was administered, became affected with very obstinate ulcerations of the throat, and with pains of the bones and joints. And in the greater number of these the disease appeared very obstinate and intractable. Indeed we have instances recorded in which the nurse has suffered the loss of the bones of the nose, and a few in which the disease terminated fatally. I am however disposed to think that these severe symptoms of the disease might be traced to the injudicious and excessive use of mercury employed for the cure of the early symptoms, without due consideration of the nature of those symptoms and of the reduced state of the system, which at this time is often debilitated by nursing. I am inclined to think that in most of these cases we should commence with under-doses of mercury. The following fact appears to me very deserving of notice—I have never seen or heard of a single instance in which a syphilitic infant, (although its mouth be ulcerated,) suckled by its own mother, had produced ulceration of her breasts; whereas very few instances have occurred where a syphilitic infant had not infected a strange hired wet nurse, and who had been previously in good health.

It is a curious fact, that I have never witnessed nor ever heard of an instance in which a child deriving the infection of syphilis from its parents has caused an ulceration in the breast of its mother. The following case when received into the hospital appeared to form an exception, but on closer enquiry this proved not to be the case. The particulars are transcribed from the hospital registry.

Anne Cullen and child, admitted into No. 9 ward, on the 19th of March, 1834, under the care of Mr. Cusack.

The child is about three months old. The extremities, the parts

of generation, the anus, and the chin, are covered with copper-coloured spots slightly raised and smooth. The child is pale but not emaciated, its bowels are rather relaxed. At birth it was healthy and well-looking, and continued so until it was about a month old, at which time the body became covered with those spots, which were of a brighter red colour than they are at present. The mother of this infant was admitted a patient into the hospital, about four years ago, for syphilis. The only symptoms she had then were pains in the bones; but about six months before that, while suckling her own child, when it was half a year old, she got a sore on the breast, near the nipple, which was soon after followed by an eruption. She stated that other women occasionally suckled her child. In a short time after the sore had appeared on her breast, she observed that the child's mouth was sore; an eruption afterwards came out all over its body; two other children, and a girl that attended them, became similarly affected—namely, with eruption and sore throat. They were all admitted at that time into the hospital; were all salivated, and discharged cured. After this she had two children; the first about two years since. When this child was a month old an eruption came out upon its body, and in two or three weeks afterwards it died. The other child, now three months old, is (with herself) a patient in the hospital. She herself says, that she never enjoyed better health than at present; her husband, also, is perfectly healthy.

Remarks.

In this case there was a very strong presumption that the infant was infected by some of those women who were allowed occasionally to suckle her child; that, from the child, she and all the other members of the family also were infected, except the husband, who was probably infected by the mother. I say, there is a presumption that this is the manner in which the infection was conveyed, because as yet I have not seen any instance in which an infant infected by the mother communicated a venereal ulcer of the nipple to her. This case shows that parents, who are not at all conscious of any derangement of health, may yet produce a child which shall, in a few weeks, exhibit the genuine characters of venereal disease, necessarily derived from one or both parents.

With respect to the treatment of the nurse and child, I believe that very little difference of opinion is to be found among authors or practitioners. All agree that it is desirable (even though the child alone show signs of the disease) to bring the nurse under the influence of mercury; and many assert, that this alone is quite sufficient to effect a cure of the disease in the child. To the latter part of this statement I have seen some exceptions, and I am certain that I have seen a good many cases in which the child appeared to be daily growing worse, until mercury was directly administered to it. Of this much I feel assured, that the cure of the infant will be more speedy if it be subjected to the use of mercury at the same

time with its nurse. I am also disposed to think that in the treatment of the nurse we shall succeed better with small doses of mercury than with large ones. I am disposed to ascribe to over anxiety of the surgeon, and consequently to too vigorous treatment, the frequent failures, and still more frequent tedious cures, of nurses infected by syphilitic infants.

The disease, as it appears in the syphilitic infant and the infected nurse, seems to differ very little, if at all, from the secondary symptoms which result from this disease of adults, as contracted by impure sexual intercourse. But if we proceed to trace further the consequences of this infection in the nurse and in the infant, we shall discover some striking particulars in which the diseases propagated by them materially differ from the ordinary forms of syphilis.

With respect to the nurse, we find that very frequently her husband becomes affected with ulcerations on the genitals; and these, in a short time, are attended by superficial ulcerations of the throat and mouth. If we have an opportunity of examining the nurse, at the time her husband first complained of ulceration of the genitals, we shall find a greater or smaller number of small raspberry-like, moist, raised excrescences, or, as some term them, ulcers, on the genitals and insides of the top of the thighs of the nurse, and this while there is no eruption on the general surface of the skin. Every one conversant with the appearances of the venereal disease in females, knows that when they are the subject of general venereal eruption their genitals are beset with them, and that all those on the genitals, or on the skin in contact with them, assume that raised moist condition above mentioned. But in the instance of infected nurses, we shall sometimes find that this condition of the genitals is an attendant on the affection of the throat, without the intervention of a general eruption of the skin. And here we must remark, that while spots of ordinary venereal eruption so generally fix upon the pudenda of the female, and there degenerate into those moist raised ulcers above mentioned, we see very few spots of venereal eruption on the male organs of generation; and those which are found there retain the characters of the general eruption; and indeed, we may add, are usually of the scaly nature.

The ulcers which are seen on the genitals of the husband, very closely resemble those on the pudenda of the woman; but they are not so much raised, do not yield as much discharge, and give us the idea that they are in a less moist structure or tissue. In a short time after the appearance of these ulcers on the genitals of the husband, he begins to complain of soreness of the throat, or of the lips and tongue. On inspecting these parts, we do not find the truly syphilitic ulcer; we see generally the palatine arches pretty extensively covered with a very superficial ulceration, with broken patches of whitish lymph, on and around the really ulcerated spots; a similar appearance, but more in the form of pretty large circular superficial ulcers, may be seen on the inside of the cheeks and lips. The tongue, if affected on the sides, presents appearances similar

to those on the cheeks; but, if the dorsum be affected, we observe a smooth patch, perfectly bald and polished, as if the papillæ had been carried off from this spot. The common occurrence of ulceration in the throat of the nurse being attended with ulceration of the pudenda, and, on the other hand, the ulcerations on the genitals of the husband being so constantly attended with affections of the throat, seem to point out some sympathetic connection between these parts, which has hitherto been overlooked. But when we come to examine more closely the circumstances under which this apparent sympathetic connection takes place, we shall find reason to call in question this solution. For we find that such sympathy between the throat and parts in the vicinity of the anus never takes place when the former is affected with any form of ulceration, except that which is distinguished by the milky-white state of the mucous membrane of the throat; so that, after the most strict investigation, we are obliged to adopt the conclusion that this apparent connection is caused rather by something peculiar in the morbid condition of the part affected than in any natural or morbid sympathy between those remote parts, the seats of co-existent disease. And, in corroboration of this opinion, I observe that in every instance of such superficial white ulceration of the throat, I always enquire, and generally discover the corresponding affection of the anus; while, on the other hand, when the patient complains of the soreness of the anus, and that we there find the superficially ulcerated or excoriated state of this part, I immediately enquire for the corresponding affection of the throat; and this latter I have not unfrequently discovered when the patient was not conscious of its existence, so little inconvenience was he suffering from it. I readily admit that we may meet with instances, where only one of these parts is thus affected at the time of our examination; but if we closely attend to the progress of the case, we shall seldom (if ever) find any which, at one period or other, either in its earlier or its later stages, has not had the other accompanying it.

I must here remark, that my observation does not supply me with an instance of the husband having contracted the disease by sexual intercourse, except when ulcers had formed on the pudenda of the nurse.

Having traced the propagation of this disease from the parents to the infant, from the infant to the nurse, and from the nurse to her husband, let us now attend to the manner in which it may be made to contaminate every other member of the same family. If we suppose, as frequently happens, that the child is suckled in the house of the wet-nurse, and that she has a numerous family of children, to one of her daughters (more particularly) is assigned the care of dressing and carrying about this infant—this is the child which first suffers from the contamination. The whole family being completely ignorant of the nature of this disease, this girl sleeps as usual with the rest of her brothers and sisters; for among the lower orders of Irish that family is considered to be in comfortable circumstances which can afford a separate bed for the

parents, while all their numerous progeny are huddled together in another bed; the discharge from the ulcers about the anus and vagina, coming in contact with one of her brothers or sisters, will produce a similar ulcer on their persons; and in this manner, obviously, a number of the family contract the disease.

The readiness with which this disease is communicated by contact, cannot be exceeded in this property by any other disease with which I am acquainted; I look upon it as equally infectious with the itch itself. Another manner in which this disease is made to spread through the family, is by the use of the same spoon, and drinking out of the same vessel with another of the family, to whose mouth the disease may have spread. Those who are acquainted with the very scanty furniture of an Irish cabin, will readily comprehend with what facility and rapidity the disease can be propagated in this manner; but to others it may be necessary to say, that the family are quite satisfied with the possession of one single spoon, and the stock of cups and cans is nearly as scanty. Exposed thus to the double risk of contracting this infection when sleeping or taking nourishment, we cannot be surprised at finding three or four, in a family of six children, all at the same time infected. I shall adduce two cases, to show the readiness with which the disease is communicated.

August 5th, 1834. Mr. D., a respectable mechanic, and his wife, had (about two years before) been under my care, on account of secondary venereal symptoms, of which I supposed them both to have been cured, although Mr. D. had not confined himself to the house while using mercury. Previously to this treatment, Mrs. D. had many miscarriages, but I could not learn any particulars of the appearance of the abortions. She now applied to me on account of her child, which is five months old: when two months old an eruption appeared, of large copper-coloured blotches on the thighs, and in the folds of the ham; the latter have degenerated into ulcers. Around the anus the skin is infected with venereal ulcers; from which, however, the child does not seem to suffer much uneasiness. On the lips, and at the angles of the mouth, there are white superficial ulcers; no affection whatever of the nose. Both parents appear to be in the enjoyment of perfect health, and the child has all the appearance of a fine thriving child; no symptom of disease in the mother. The mother says that the eruption on the child has been improved by washes, and some internal medicines, which she got from her apothecary in the country. The child does not seem to be fretful, or suffering any pain. I advised hydr. c. creta for the infant, and directed both parents to commence a course of pil. hydr.

As the parents lived thirty miles from Dublin, I had but few opportunities of witnessing the progress of the disease. I did not see the child again until the 28th of August, 1834, when the symptoms of the infant appeared much relieved. The mother was sensibly (if not fully) under the influence of mercury; the father very slightly affected.

They now introduced to me another patient, a young country girl, about 13 years of age; she is their servant, and has had very much the care of the child. She has a superficial white ulceration of the throat, stretching low down on the right arch and tonsil; the body and limbs covered with an eruption of copper-coloured spots, very thickly set; on the legs these spots are smaller, and of a much darker hue; on the thighs they are larger and more distinctly of the copper hue; she has no soreness or ulceration about the anus or pudendi. Sumat pil. hydr. gr. iv. mane nocteque.

Neither eruption, ulcer, or any other symptom, is discoverable in the mother.

October 2d. The eruption on the child is scarcely visible; ulcers of the mouth healed; the skin of each buttock, close to the anus, is superficially ulcerated, presenting pretty strong characters of venereal ulcers.

The servant girl is affected by the mercury; eruption faded a good deal; throat free from ulcers, but those spots which had been ulcerated retain too high a colour. She now complains of a superficial, but venereal-looking ulcer, which occupies the adjacent sides of the third and fourth toes.

December 12th. The child is now free from every symptom, except the ulcers at the anus; these appear very little improved, but they do not give much uneasiness; the marks of the eruption are still of too high a colour. Lotio nigra ulceribus apud anum. Sumat hydr. c. creta gr. ij. alternis noct.

The servant girl appears quite free from disease; the ulcers of the throat, and that of the toes, have healed; both she and the mother of the child have had their mouths smartly affected with mercury for the last six or seven weeks.

The father's system has been, in a slighter degree, under the influence of mercury for ten weeks past; I have therefore concluded that the parents and servant are well, and have desired the mercury to be discontinued.

May 16th, 1835. The father informs me that his wife and the servant maid are both well, and have not had any return of the symptoms.

The child was weaned a month ago; it appears in excellent general health, and the ulcer on one side of the anus is healed, the other is still very little improved. R. ung. zinci ʒss. ung. hydr. nitr. ʒss. ft. ung. ulceri applicand. Repet. pulv. hydr. c. creta alt. noct.

June 30th. The ulcer of the anus was healed in three weeks, by the use of the ointment. The child is in excellent general health, and is now a year and a quarter old. Omitt. medicamenta.

February 13th, 1836. The child is in excellent health; no return of any symptom.

The mother was delivered of a fine child six weeks ago; the infant continues very healthy.

In this case it is perfectly obvious that the servant girl received the infection from the infant; it would seem to have first affected

the mouth and throat. The ulcer between the toes was so strongly marked as a superficial venereal ulcer, that I had no hesitation in considering it as a part of the same disease; and here let it be observed, that the mother had not in any degree, or in any way, suffered from the disease of the child: she had not received any infection from her own child, yet the disease was capable of infecting the servant girl. This child's health was in all probability upheld, and the venereal complaints kept at bay, by the medicines which were given to it before the parents brought it to town; and it is not very unreasonable to suppose, that mercury formed one ingredient in its medicines, when we consider how very generally hydr. c. creta is given to children. I do not, however, suppose that the apothecary was aware of the real nature of the case, as he did not even hint any suspicion of this sort to the parents.

The ulcer near the anus, when it appears in a late stage of syphilis of infants, is generally very slow in improving, and requires that the internal use of mercury should be assisted by some stimulating mercurial application locally. Indeed, I have some doubts whether this ulcer could be healed by the mere action of mercurial medicines on the general system.

Michael Swain, æt. 60, admitted into No. 3 ward, under Mr. Colles's care, November 9th, 1829. He states, that about ten weeks since a fissure formed in the left angle of the mouth, and at the same time the inside of the lip became excoriated; since that time the disease has been increasing. At present there is a fissure, with indurated edges, in the part before mentioned; the gums are soft and red; the lower lip, the posterior part of the palate, and the pharynx, are studded over with superficial ulcerations. Between the root of the tongue and the arches of the palate, on the right side, are fissures resembling that in the corner of the mouth; all these parts are of a bright red colour, spongy-looking, studded with whitish eminences, and harder than natural; the parts so affected are but slightly painful; the secretion of saliva is profuse, and that fluid is turbid.

A few days since, sores of the same description formed around the verge of the anus.

He asserts, that he had not exposed himself to venereal infection by any illicit intercourse; but believes that a woman and child, lodging in his family, had the disease, and he and his children used the same spoons with them. He has taken some pills, given him by an apothecary, and used a lotion for the mouth, but he is ignorant of the nature of these remedies.

November 10th. R. decocti hordei ʒvi, spt. terebinth. ʒi. vitell. ovii. Ft. gargarisma.

14th. Repet. gargarisma. Utatur lotione nigra ulceribus circa anum.

21st. Ulcers around the anus are nearly well. Repet. garg. et lotione.

27th. Excoriations on the inside of the lips, and on the palate,

are more healed; the back of the pharynx and side of the tongue are much improved; those around the anus are quite well. Repet. gargarisma.

December 5th. Nearly well; slight redness of the soft palate and pharynx alone existing at present, with very superficial ulcers at the bases of the palatine arches. Repet. gargarisma.

26th. Discharged; free from all complaints.

Dorah Swaine, æt. 10, and Margaret, æt. 8, daughters of Michael Swaine, admitted into No. 9 ward, on the 18th of November, 1829. Dorah has numerous excoriations on the covering of the hard palate; the uvula and tonsils in the same state, the latter organs being much enlarged; on the dorsum of the tongue, near the base, are two large circular patches, elevated, and much resembling condylomatous excrescences, as they appear near the anus: the pharynx also is excoriated, and covered with viscid matter; the parts in the immediate vicinity of the sores are of a colour too highly red; the diseased parts are not very painful; deglutition is very slightly affected.

There are several condylomatous excrescences on the inside of the labia pudendi. This girl was attacked with sore throat about one week after her father. Ordered lotio nigra.

Margaret Swaine has large superficial excoriations engaging the posterior part of the dorsum of the tongue, in the centre of which is a slight furrow; the gum surrounding the last molar tooth in the upper jaw of the right side, and all the soft palate, tonsils, and pharynx, present an uniform red and excoriated surface; there are also several ulcerated spots on the inside of the cheeks; she has also condylomatous excrescences on the inner surface of the labia pudendi.

Both these children were exposed to the disease in the same manner as the father; they also used the same remedies.—Extracted from the case books of Steevens's Hospital.

I shall now give the history of this disease spreading through an entire family, all of whom were previously healthy, and to whom the infection was brought by a servant girl, who was dry-nursing a syphilitic infant in another family—the infant having died of the disease. The servant girl was received into Steevens's hospital; and the history of her case and reports of the treatment are as follow.

Margaret O'Reilley, æt. 23, an unmarried country girl, admitted on the 18th of December, 1836, into No. 9 ward, under Mr. Colles. On the right side of each lip, near the median line, and within the red border, exists an aphthous-looking sore, with a whitish surface, irregular edge, and indurated base, a little raised above the level of the surrounding parts; that on the upper is about twice the size of a split pea, while that on the lower is something larger; they are placed directly opposite each other. At the angle of the mouth is the raised and soft cicatrix of a former ulcer; on the left side of the tongue, near its apex, there is an oval-shaped ulcer, about the size of a sixpence, possessing the same characters as those on the

lips, but the surface appears more elevated, and the upper edge more regular and defined; she only feels pain in these ulcers while eating, or on being touched by any thing, and is not annoyed by a constant flow of saliva into the mouth. The dorsum and remaining sides of the tongue are fissured irregularly where former sores had existed, but which are now healed. Beneath the chin four or five glands can be felt enlarged, firm, but not very hard; the central one is a little painful when pressed on. Two or three small depressed bluish cicatrices mark the situation of former openings there. She complains of occasional pains in the shoulder, which come on accompanied with some stiffness, generally towards evening; is sometimes affected with pain in the head, and with pyrosis; her appetite is good, sleeps well at night, and general health unimpaired; pulse 86.

She states, that six months since, while nurse-tending a child which had a sore mouth, and some spots of eruption on the body, and the nurse of which had a sore on the nipple, she became affected with a sore at the angle of the mouth, and inside of the cheek of the left side; in a fortnight after it began to affect the tongue on the same side, and she has continued to be affected on different parts of the mouth, at different periods; the sores healing up in one place, and breaking out in another, but never being completely free from disease since its first commencement. The present sores have existed for the last six weeks, and have never been touched with any caustic application, which the others had frequently applied to them. The pains in her shoulder came on about three or four weeks ago, accompanied with some soreness of the throat, which she ascribed to cold; she had also some slight soreness about the anus; the pains were so violent as to prevent her working, but they had remitted a few days before her admission.

The swellings under the chin have been there these two years past, and did not subside after suppuration had occurred, nor are they larger since the present disease made its appearance. It is worthy of remark, that seven or eight weeks after the commencement of the sores, she went to the house of one of her relatives (Hogarty); and having remained there for more than a month, several of the family caught the disease from her.

December 20th. The sore on the tongue is much smaller since the last report, and several red patches are appearing through its white surface; that on the lower lip has spread in a small patch near the gum.

26th. The sore on the upper lip has almost healed; that on the lower is smaller, except where the new spot had appeared, as mentioned on the 24th. The ulceration on the tongue is now distinctly striated red and white; had the pains in her shoulder last night.

March 10th. Ung. hydr. 3ss. et pil. hydr. gr. v. opii.

19th. Repet. remedia. 22d. Repet. remedia. 26th. Bal. tep. ung. hydr. 3ss. opii. 29th. Repet. omnia.

April 2d. Ung. hydr. 3 ss. opii. 5th. Pergat. 9th. Pergat.
 12th. Olei ricini ʒ ss. c. tinct. opii gr. xx. pulv. Dover. gr. x. opii.
 16th. Vesicatorium nuchæ. Pulv. Dover. gr. x. opii.
 19th. Bal. tep. Mist. purg.
 26th. Nitratis potassæ gr. x. ter in die.
 30th. Mist. purg.
 May 3d. Bal. tep. Mist. purg.
 14th. Gargarisma astr.
 Discharged, on the 22d of May, cured.

In this case a variety of remedies were used before recourse was had to mercury; and she passed through a severe and tedious fever, shortly after her admission into the hospital.

If we attend carefully to the history, and to the course of this case, we cannot but be convinced of the greater danger of infection which those run who are exposed to contact with that person who is only one degree removed from the infected child.

Hogarty and Family.

December 15th, 1835. The disease was most positively introduced into this family by the servant girl, O'Reilley, who was hired to dry-nurse the youngest child while weaning. The mother asserts that this girl, when she came to live with her, had, (in addition to the symptoms mentioned in O'Reilley's case) sores on the pudenda, similar to those on the inside of the lips.

The infant is reported to have taken the infection first in its mouth; after some few weeks it appeared on the genitals. Next the mother took it; in her it appeared first in the mouth, and then in the genitals; she says that in the latter situation it appeared like small buttons. The genitals are now free from any appearance of it, but she has a patch of superficial ulceration, accompanied with a slight swelling, on the inside of the lower lip, a superficial ulcer at each angle of the mouth, and two white ulcers, or rather blisters, under the apex of the tongue.

The daughter, twelve years old, had it first on her mouth, where now only a too high state of redness is to be seen. Her mother said that it was on the pudenda of the daughter; but, on examination, I could only discover on the external labium one raised spot, exactly resembling the cicatrix formed by button scurvy.

The father says it first appeared on him as a sore on the penis; this has healed without leaving any mark; it next appeared at the anus; at present there are on each side of the groove leading to the anus, two small circular copper-coloured spots, the surfaces of which are constantly moist, yet one only of them can be said to be ulcerated; on the under surface of the tongue, near to its apex, is a small white raised spot; on the right anterior arch of the palate, is a superficial white ulceration, or rather rugose patch; a long white ulcer is seen on the inner surface of the right cheek.

I directed each of the females to take pil. hydr. gr. v. om. nocte, and the father to take a similar dose night and morning.

February 8th, 1836. None of the family used the medicine for a longer period than three or four days. They have now come into town (a distance of seven or eight miles), and their present symptoms are—

The father—the small ulcers on each side of the anus are as described on the 15th of December last; on the right tonsil is a distinct ulcer, not deep; on the left anterior arch is a pretty broad excoriation; a superficial ulcer on the red border of the upper lip.

Wife—her symptoms have scarcely altered since December; so little, that the difference could not be described by words.

The daughter has now no trace of it in the mouth; but she has a slight swelling, with superficial ulceration, on the labia pudendi, and on the preputium of the clitoris.

One spot on the mother's lip is exactly the same as the spot on the lip of the servant girl, O'Reilley.

I rubbed sulph. cupri to the diseased spots in the mouth of the mother, and gave a wash of acet. cupri, to be applied to the ulcers at the anus of the husband, and the pudenda of the daughter.

September 22d, 1836. Father—general health very good; his mouth is well, except one white spot on the right side of the tongue.

The mother says that she had an ulcer on the inside of the lower lip for five months previously to her confinement, but that since that occurrence she has been well, and now nurses her infant. The infant is three months old, and perfectly free from any symptom of the disease.

The daughter died a fortnight ago of scarlatina; I am informed by her mother, that she had one sore spot in her mouth at the time she was seized with scarlatina.

The child, which was the first of the family infected, was brought to me this day. It is now three years old; and apparently in robust health. It was one year and four months old when it was first infected, the disease commencing in its mouth and throat.

I have had an opportunity of seeing the members of this family to-day, not because they wished to consult me on account of this extraordinary disease, with which so many of its members had been afflicted, but that I should prescribe for the father, who had received a very slight wound of the cornea, from a splinter of stone which struck it while he was at his work of a stone mason. The family living at the distance of seven or eight miles from Dublin, and being poor, could not be induced to come into Dublin more frequently than above represented; of course I had no opportunity of watching the effects of remedies, and I wished rather to watch the progress of the disease undisturbed by treatment, than to direct any particular plan, which I well knew would not (and, indeed, could not) be followed with punctuality by persons in their condition. Their sufferings were not so severe as to oblige them to seek for admission into an hospital. The small quantity of mercury which any one of them used, was so very inconsiderable that it may be left out of the account altogether.

The history of this disease, propagated by an infected infant, would be incomplete if I did not add, that sometimes one or more of the soft raised ulcers will be found in the axillæ, and occasionally, though more rarely, in the folds of the groin.

That this disease is derived from lues venerea, I think has been clearly shown; and yet it does not in every respect resemble the lues of adults, but possesses some characters peculiar to itself. And, *first*, it appears to be infinitely more contagious; for very rarely do any escape who are for a short time exposed to its infection; this is not the case with the syphilis of adults, for we know that very frequently men escape, though exposed to infection under circumstances calculated to render the parts highly susceptible, and to facilitate the introduction of the poison. And here I would remark, that in the very remote parts of Ireland, the poor people are so strongly impressed with the notion of the very infectious nature of the venereal disease, that if they be told that a stranger whom they had lodged in their house for a night, had this disease, they would instantly burn the straw seat upon which he had been sitting. I may be told by some, that men may contract syphilis by sitting in a public privy; to this I can only answer, that I have never witnessed a single instance; nor did the late Mr. Obre, who had been for many years most extensively engaged in treating the venereal disease; for, on asking him if he believed that the disease was propagated in this manner, he shrewdly answered, that it sometimes was the manner in which *married* men contracted it, but *unmarried* men never caught it in this manner.

Secondly. The symptoms of this disease bear a most exact resemblance to each other, in every individual affected by it;—neither age nor sex, nor difference of temperament, seem to make it differ in its characters, even though it may have existed for some months. Now we know that syphilis in adults is subject to very considerable varieties, modified perhaps by peculiarity of constitutions—ex. gr. the various forms of eruption, the great varieties in venereal ulcers of the throat, &c. &c.

Thirdly. This disease, in the third remove from the original syphilitic infection, appears to be permanently fixed to the parts it first seizes, and to be of a much milder nature than the corresponding symptoms of pure syphilis. Thus we do not find that in the throat it ever assumes that destructive form of ulceration, which too often attends venereal sore throat of adults. I have never yet seen an instance of loss of substance caused by this disease, even though it may have existed for more than twelve months.

Again: I have never seen this disease produce ozæna or iritis; I have not known it in any case affect the bones or joints; nor, in men, affect the testes.

Fourthly. This disease appears to become less virulent as it becomes farther removed from the fountain head; of this we become assured, by observing the greater facility with which the

cases of more remote infection are cured. Thus we find, that when the disease originates with the infant, the use of mercury is absolutely necessary for the cure of the infant;—unless this be employed, the child dies. The nurse infected by this child must undergo a course of mercury for the cure of her symptoms; the husband also must undergo a mercurial course, to effect a cure of his symptoms. Such of the attendants as contract the disease by immediate and direct contact with the ulcers of the child, will also require mercury for their cure. But such other members of the family as receive the infection from the attendant thus affected, these may all dispense with the use of mercury. These positions are many of them borne out by the history of Hogarty's family; for the servant girl, O'Reilley, who was infected directly by the diseased infant which died, could not be cured without mercury. The length of time that she remained in the hospital, and the number and variety of other medicines which she in vain employed, are sufficient to establish this fact. Nor was the disease removed, even temporarily, by a very smart attack of fever, which continued for three weeks and upwards. Yet neither Hogarty's child, which was contaminated by this servant girl, nor his wife, who received the infection from her own infant, required mercury to cure them; the infant appeared to have been cured by a medical practitioner in their neighbourhood, who employed washes of different kinds, and a few powders internally. The disease of the mother seems to have been eradicated by parturition, although it had resisted various local applications irregularly employed, and had continued to afflict her for a period of many weeks. The disease of the father may be considered as cured, as he had only one small white spot on the tongue.

One fact well deserving our attention is this; that a child born of a mother who is without any obvious venereal symptoms, and which, without being exposed to any infection subsequent to its birth, shows this disease when a few weeks old, this child will infect the most healthy nurse, whether she suckle it, or merely handle and dress it; and yet this child is never known to infect its own mother, even though she suckle it while it has venereal ulcers of the lips and tongue.

CHAPTER XV.

PSEUDO SYPHILIS.

There is no class of complaints in which we may not occasionally meet with instances in which the distinctive characters of the disease are but faintly marked, and in which the symptoms of some other disease are more or less closely imitated. The venereal disease

does not form an exception to this assertion ; on the contrary, it is among those which are most subject to this irregularity : and this remark applies to each symptom separately, as well as to the combination and to the order of succession of its symptoms.

In the present state of our knowledge, I think it is impossible to lay down any rules by which our judgment can be correctly guided in deciding on the nature of those simulating cases ; for surgeons now no longer acquiesce in the opinion of Mr. Hunter, page 439 ; “ The venereal matter, when taken into the constitution, produces an irritation which is capable of being continued independent of a continuance of absorption, and the constitution has no power of relief ; therefore a lues venerea continues to increase. This circumstance is perhaps one of the best distinguishing marks of the lues venerea, for in its ulcers and blotches it is often imitated by other diseases ; which, not having this property, will therefore heal, and break out again in some other part. Diseases in which this happens, show themselves not to be venereal ; however, we are not to conclude, because they do not heal of themselves, and give way only to mercury, that therefore they are venereal, although this circumstance, joined to others, gives a strong suspicion of their being such.” Nor do surgeons agree with Mr. Abernethy, in admitting that those simulating diseases are not venereal, “ because they got well without mercury.” On the contrary, I should think that there are few surgeons of the present day, who have read the statements published by several military surgeons of Great Britain, of the appearance and progress of syphilis, as it appeared in the late Peninsular war, who do not believe that the symptoms of syphilis occasionally disappear without the use of mercury ; and there is no surgeon extensively engaged in this branch of his profession, who has not in his own practice repeatedly observed that the venereal disease, both in its primary and secondary forms, will sometimes be made worse by the use of mercury, and yet at some future period this very same case will yield to and be cured by mercury, and by mercury alone. We now no longer entertain the opinion that mercury is a test of the syphilitic, or the non-syphilitic nature of any particular case. I think, that in deciding on primary ulcers, there is one source of doubt and difficulty very deserving of attention, and yet it is one which I believe has been very generally overlooked ; I mean the discharge from those excrescences on the genitals of females, which attend on venereal eruptions, and on some forms of venereal sore throat. This discharge is capable of producing an ulcer on the genitals of the male ; and this ulcer, though in appearance and character very unlike the true chancre, is yet capable of contaminating the general system, and of inducing secondary venereal symptoms. The confusion which may arise from our overlooking this fact, does not stop here : for by watching the progress of the secondary symptoms consequent on this form of primary ulcer, we shall soon discover that these also differ, in many material points, from the corresponding secondary symptoms which follow an Hunterian, or a true venereal chancre. By referring to the chapter

on the Syphilis of Infants, we shall see these positions clearly illustrated and amply proved.

The next circumstance which tends to embarrass our judgments, in deciding as to the true nature of primary symptoms, is the variety in the effects of mercury, according to the manner in which it has been employed, and according to the influence which it has exerted on the constitution. Thus the appearances exhibited by a chancre or bubo, when mercury has been administered in doses so large as to have induced a general febrile irritation, will be very different from those changes which a legitimate pytalism will effect. And even the appearance produced by this injudicious exhibition of mercury, will be different, according as this medicine has been early discontinued, or has been obstinately persevered in for a length of time. I believe few will hesitate to admit, that inordinate and unsuitably large doses of mercury alter the appearance of primary symptoms, and often derange the succession of the secondary. But I fancy it is not so generally known, that moderate and suitable doses of mercury may be mismanaged, so as to be productive of less serious mischief to the system in general, but of equal or even greater perplexity to the surgeon who is to decide on the nature of local symptoms. I mean when these moderate doses have been so employed, that the patient was made to desist from their use the moment even a slight approach to pytalism was perceptible, and was desired to resume them again when all tendency to pytalism had subsided: when by repeatedly resuming and relinquishing mercury, without allowing it ever to act on the salivary organs, the general system comes to be irritated into a sharp degree of fever, and to be acted on by mercury as if by a poison. I imagine that many surgeons indulge the hope that moderate doses of mercury can do no harm; but they do not seem aware that when employed in this very timid manner, it may alter materially, though not cure the symptoms, and may as completely, though more slowly, break down the constitution, as when it is exhibited in excessive doses, and for a shorter period. This error in the administration of mercury I look upon as a very fertile source of those derangements or irregularities in the appearance and in the order of succession of the various symptoms of the venereal disease.

Now while I admit that some ulcers of the genitals, and some affections of the inguinal glands, are occasionally met with, which, though not venereal, yet strongly resemble the primary symptoms of that disease; and while I freely declare, that I have repeatedly met with a combination of symptoms which were with difficulty to be distinguished from secondary venereal symptoms, yet I cannot believe that the number of those diseases which resemble or simulate syphilis, is so great as many authors would lead us to suppose. And, indeed, I must say, that the attempt to form a new class of diseases, designated "Pseudo Syphilis," or "Cachexia Syphilitica," has only tended to embarrass our practice, and to divert our attention from the real causes of those irregularities. Instead, therefore, of any attempt to point out the distinctive characters whereby we

are to discriminate between the true syphilitic, and the pseudo syphilitic case, I should rather recommend to apply ourselves sedulously to search out the natural history of the venereal disease, and to become acquainted with all those (probably minute) circumstances which influence the effect of mercury on the general system, and on the particular symptoms of the venereal disease. In the mean time, I do not apprehend that much mischief is likely to arise from our occasionally treating as venereal another disease, resembling it, provided that the mercury be given with due caution, and regulated by sound judgment. Mr. Abernethy himself makes the following admission :—"The effect of exciting a mercurial affection of the constitution in diseases resembling syphilis, is, as far as my observation enables me to determine, very various. It sometimes cures them very suddenly, and very differently from the gradual amendment which it produces in truly venereal diseases. Sometimes, however, these diseases yield more slowly to its operation, and are cured permanently. Sometimes the diseases recur in the same parts, after a severe course of mercury; sometimes mercury merely checks the disease, and can scarcely be said to cure it; in which case it seems important to support the strength of the constitution, and to keep up that mercurial effect which controls the disease, and can be borne without material derangement of the constitution for a great length of time. Sometimes, also, the use of mercury aggravates these diseases."

Now it appears to me, that, unless in some few instances which involve the moral character of the patient, it is not material by what designation we mark the disease, provided that we do but cure it. The patient will not be less grateful for the favour; though his disease may have been misnamed, he will be quite satisfied if it have not been mismanaged. I suspect that a frequent cause of our failures in the treatment of such cases, whether those broken down cases of syphilis with their distinctive characters very much impaired, or those cases of general cachexia which assume some characters of syphilis; I say, the cause of our failing to cure such, has been an over-anxiety to push the mercury to such an extent as to afford a security against a return of symptoms which had previously eluded the action of this medicine. If we lay it down as a rule of practice in such case, to use mercury in very moderate doses, suited to the condition of the general health, and to support the strength of the patient during the influence of a mild ptyalism, I imagine that our success, in these hitherto deplorable cases, will be most gratifying; and, assuredly, by such a line of conduct, we shall avoid all those mischiefs and dangers which have followed in such cases from the too large use of mercury.

From the records of the hospital I shall extract the following case, which is headed "Cachexia Syphiloidea" by the clinical clerk, a young, but a very intelligent surgeon.

Anthony Brady, æt. 32, a shoemaker, greatly emaciated, admitted into No. 3 ward, 12th of December, 1835.

He states, that he was first subject to the influence of mercury

eleven years ago, for the cure of a gonorrhœa; and again, three months afterwards, for a bubo, unaccompanied by any sore on the penis.

Ten years since, he contracted an ulcer on the penis, together with a gonorrhœa, for which he was salivated; the sore had scarcely healed, when he was attacked with pains in the larger joints, followed by emaciation, fertile symptoms, and an eruption of pustules, which degenerated into small ulcers covered with scabs. He was now admitted, for the first time, into a London hospital, where he again used mercury; the spots of eruption, healed; their white and smooth cicatrices are still evident on the face and arms. He left the hospital, of his own accord, two months from the time of his admission, and returned again with a second eruption of the same kind, and more debilitated than ever; one of the spots in each ham assumed the phagædenic character, became larger than any of the others, and were very painful; but he got rid of all these symptoms in nine weeks, without his mouth having been affected by mercury. Pains in his joints were now the only symptoms remaining, which continued to affect him for a year and a half; when, after exposure to cold, he was attacked with iritis of the left eye, was admitted into the hospital, and again salivated. About the same period, the right testicle began to enlarge, became very hard, but not painful; the treatment not seeming to produce any good effect, he was recommended to have it removed; but before he was strong enough to bear the operation, an abscess formed in its substance, which was opened, and a fungus soon after protruded, but was removed by caustic applications, and alterative doses of mercury. He was discharged, to go to the country, three months from the date of his admission, the testicle remaining enlarged, and the situation of the fungus not quite healed. The ulcer, however, soon after cicatrised; and the testicle finally wasted away to its present size. He returned again in six months afterwards, with pains in his bones, and nodes on his forehead and shins, and two spots of phagædenic venereal eruption on the hip and thigh of the left side; he also had sore throat, and ozæna. The node on the forehead was opened; no bit of bone ever came away from it, though a depression exists there, marking the loss of substance. He had exfoliations from both tibiæ, and lost several of the nasal bones, and the greater part of the septum.

His mouth was made sore twice while he remained in the hospital, from which he was discharged one year and nine months from the time of his admission; and the ulcers on his legs, where the bone had exfoliated, were not yet healed.

It is now six years since that time. Debility, emaciations, night sweats, pains, and loss of rest, were then his principal symptoms; for which latter he was obliged to take laudanum to procure sleep, and which he has continued to do ever since. When he went to the country he became somewhat stronger, and gained flesh; the pains, however, continued; his knees became stiff, so that they were kept constantly in the semiflexed position, and a year after-

wards he was admitted into another hospital; where, after remaining in bed for three months, and using some medicine which did not affect his mouth, he was again able to move about. The ulcer on the right leg was also healed, but broke out again immediately on getting up; some swelling which had existed in the right knee, had likewise disappeared. From this time, though not quite free from the pains, he was able to move about, and work at his trade, until about six months ago, when he got cold, and the pains were increased, which have ever since kept him almost constantly confined to bed. He accidentally hurt the left testicle about four months ago, which became swollen and painful soon after; the pain subsided, but the enlargement continued to increase.

His knees have again become stiff these last three months, and his body more emaciated than ever.

The left testicle and epididymis, which can no longer be felt distinct, are enlarged to the size and shape of a turkey's egg, even and uniform on the surface; they have a firm and solid feel posteriorly, while anteriorly the swelling is tense and elastic; there is some effusion into the tunica vaginalis, but not in sufficient quantity to render the tumour transparent. He has not the least pain in the testis, but he feels a sensation of weakness in his loins when it is allowed to hang. The spermatic cord is very slightly enlarged; the vas deferens possesses its natural size; the scrotum moves freely over the testicle, and is not discoloured. The opposite testicle is only half its original size.

The liver appears to be enlarged, but from the tense state of his abdominal muscles, it is impossible to examine it accurately with the hand. There is also an enlargement of the glands of the groin, but none of those of the axilla, or neck.

He has pains in his shoulders and knees, which latter are kept permanently semiflexed, and cannot be extended; the left one is very tender to the touch, with some effusion into the joint. The ulcers on the legs, where the bone exfoliated, present a very irregular appearance; that on the right leg is situated at its upper and outer part, sinks between the bones, its margins are uneven, and of a purplish colour, and its surface covered in some places with a whitish matter, that cannot be wiped off. That on the opposite limb is lower down, smaller, and deeper, and a probe, passed to its bottom, detects a portion of the bone to be in a carious state. A soft node exists above the outer ankle of this side. The legs are extenuated to the last degree, not the slightest appearance of the calf—they certainly answer to the description of being only skin and bone.

He complains of languor, debility, and constant lowness of spirits; his sleep is broken and disturbed, scarcely ever more than two hours at a time, though to procure it he is obliged to take half an ounce of laudanum every night; and, when omitted, his condition is most miserable, and the pains are dreadfully severe. His appetite is bad, tongue clean, and bowels regular; pulse 76, soft and weak. He complains of an occasional fluttering about his heart,

and coldness of his extremities, especially if he did not take his usual dose of opium; the sounds of the heart are however perfectly healthy. No perspirations at night.

Soon after his admission he was put on hydriodate of potash, which was stopped in consequence of its disagreeing with the stomach and bowels. Since that time he has been taking sarsaparilla and quinine.

February 13th, 1836. Appetite has improved, but he has not gained flesh or strength since admission; the pains in his shoulders have disappeared, but are still present in the knee joints at night; the fluid effused into the right one has been absorbed.

The dose of tincture of opium has been diminished to three drams every night. Pergat cum quinæ sulph. Vini rubri ℥iv. o. d.

February 22d. No further change; the soft node has disappeared. Ung. hyd. gr. x. o. n. genibus affricanda.

28th. Has rubbed in five times; pains in the knees are somewhat better, and he is able to extend them a little. Pulse 80; other symptoms continue. Pergat.

March 6th. His mouth is beginning to be affected by the mercury; the pains in his knees have disappeared, and he is able to stretch them further than at the last report. The ulcer on the left leg has assumed the healing aspect, and its surface is clean and granular; the one on the opposite limb still presents a whitish surface. The effusion into the tunica vaginalis is less, and the testicle is smaller; appetite improved; bowels regular; pulse 84. The dose of tincture of opium has been diminished to two drams every night. Pergat.

8th. Mouth sore. Omitt. ung. hyd.

10th. The salivation continues; he feels much stronger; he is now able to extend the knees better, but not yet perfectly; the fluttering at his heart has disappeared; the swelling of the testicle has decreased; he sleeps better at night; pulse 84. Simple dressing to ulcers.

15th. The ulcer on the right leg is almost healed; that on the left has extended, and its surface is whitish; discharge thin, and in some quantity; he sometimes feels stings of pain in it. His appetite is now good; pulse 88; strength increasing. Tinct. opii ʒss. o. n.

18th. The sore on the left leg has improved in appearance; is red and granular, and discharges healthy pus. He looks much better, and is beginning to gain flesh. Pergat et lotio nigra ulceri, et tinct. opii ʒiss. om. nocte.

25th. Sulph. quinæ gr. ij. ter in die, tinct. opii ʒj. o. n.

April 2d. He has gained flesh, and become much stronger, since last report; his appetite is very good; he has no pains, and he sleeps almost as well, after taking ʒss. of tincture of opium at night, as he did before, when his usual dose was half an ounce, but is very easily awakened; tongue clean; pulse 84.

The ulceration on the left leg is beginning to fill up with granulations, and is now not larger than a sixpence; the discharge from it is diminished; the one on the opposite limb has healed.

He is not yet able fully to extend the legs, nor can he bear on them from weakness; he feels no pain in the knees, but is often annoyed at night with starting in them, extending down to the soles of the feet. He now walks about the ward with the help of a walking stick.

The left testicle is now only a little larger than natural; but remains hardened, though the induration is not so great as on admission. Lint. camph. genibus affricand. Sulph. quin. gr. ij. ter in die.

This man felt himself so much improved, that he quitted the hospital about the middle of April, having continued to improve daily.

In my opinion, we often meet with cases of cachectic patients, whose health is much more quickly restored by the use of very small doses of blue pill, or some other mild mercurial, combined with such other medicines as the circumstances of their cases may require. The mischief occasioned hitherto by giving mercury in such cases, seems to me to have arisen from its having been employed in the ordinary doses, instead of doses extremely minute.

CHAPTER XVI.

ON THE NON-MERCURIAL TREATMENT OF SYPHILIS.

I shall not, with my limited experience of this plan of treatment, attempt to enter into a detailed account of its application to particular symptoms; I shall only offer a few general remarks. When this plan first attracted the notice of the surgeons of Great Britain, both my colleagues and myself adopted it in our hospital. In general we confined this treatment to men who had not used any mercury; but, as in Dublin it is extremely difficult to meet with venereal cases in hospital, who have not applied to some apothecary, or received medicines at a dispensary, we could not adopt it as the general practice of the institution. However, we tried it until we all became convinced of this fact,—that it was not suited to patients who were obliged to earn their bread by labour; for we saw that after they had left the hospital, and got into employment, they generally found themselves weak, and unequal to their usual labour; and often, at the end of two or three months, they returned emaciated, pale, and enfeebled, in consequence of the hectic form of fever which was about to usher in a new series of venereal symptoms. Their stay in the hospital also proved, in general, very protracted; so that they then became impatient of this treatment, especially when they saw others with similar symptoms, in the same ward, have their complaints more quickly cured by the

use of mercury. In private practice, also, I employed it for a time ; but not finding it superior in point of quickness of cure, or of security against a relapse, and observing that these relapses were more frequently reiterated, in a short time I ceased to employ it, except at the express solicitation of the patient. But I had many opportunities of witnessing the results of the practice of some of my brethren, who adopted it more fully. Of course I could not know much of those cases in which this practice was successful ; but in many of those who suffered from secondary symptoms, and from relapses of the different series of secondary symptoms, I had melancholy proof that this treatment was too often unequal to remove syphilis. No doubt fewer of the non-mercurial patients complained of affections of the bones, than those who had been ineffectually treated by mercury ; but I saw instances of closed pupil and opaque lens, produced by iritis which had been neglected, not having been considered as venereal symptoms. I have seen many cases where the soft parts of the throat had suffered severe mutilations ; and, above all, I had too many opportunities of watching the very slow and silent, but sure inroads, which the often-repeated attacks of secondary symptoms made on the constitutions of the patients ; of witnessing this phenomenon, that the venereal disease, from year to year, showed itself with less striking characteristics, while other diseases appeared to spring up ; so that, for some months before the death of such patients, it would require a close examination to discover the one or two slightly marked symptoms of syphilis which remained ; and also required close research to trace the symptoms of apparently the last and fatal disease to its true source, the infection of syphilis. But on tracing the state of health, from the primary ulcer down to the final and fatal disease, I could clearly see that at no period was the unhappy sufferer altogether free from the venereal disease ; so that both the patients and their friends, in many instances, lost sight of the original syphilitic disease, and referred the death to some other apparent cause, such as ascites, or some disease of the lungs. Nor is it to be wondered at, that non-professional persons should form such an erroneous opinion, seeing that the course of some of these fatal cases had occupied a period of four or five years, between the appearance of the primary ulcer and the fatal event. In a word, after the experience of one year's full trial of the non-mercurial plan, we have since, in our hospital practice, only employed it rarely, and generally in very mild slight cases of primary symptoms.

But we must acknowledge that the profession is highly indebted to those who have lately introduced the non-mercurial plan of treatment ; for we have now not only acquired a second line of treatment for venereal cases, but, what is of the highest value, we have been released from an inveterate and deep-rooted error—from an unfounded conviction that the venereal disease could not be cured by the innate powers of the system, unless aided by mercury. I need not add, that all the opinions and practices consequent on this prejudice have been subverted.

I think it must, however, be admitted, that the non-mercurial plan has not fully answered the expectations of its early admirers. All will allow, that many cases of syphilis have resisted this treatment, and were afterwards cured by mercury. Let us revert to the history of its introduction. It was introduced at a time when (in Great Britain) mercury was rather in disrepute; and when in the Peninsular army the venereal disease, treated by mercury, was making frightful havoc among the soldiery. It was tried on a scale beyond that of any other medical experiment, and under circumstances the most favourable; the patients being subjected to military discipline and restraint. In civil life it would naturally obtain a preference from both patient and surgeon; the former would be relieved from all the horrors of a mercurial course, the latter find in it a line of practice simple, plain, and safe; one that required not any extensive observation of the venereal disease, or any nice and accurate judgment in the employment of the remedies. Yet it has not superseded the mercurial plan of treatment: on the contrary, it seems now, after a trial of twenty years, to have fewer and less warm admirers. This may possibly be accounted for, by observing that this plan subjects the patient, especially when the symptoms are of an inflammatory character, to the most rigid quiet, even continued confinement to bed, to repeated bleedings both general and local, and to the long-continued use of nauseating medicines, to frequent purging and very low diet. So that, during the treatment, the patient is subject to all this severe discipline; and, after it, suffers a proportional degree of weakness; and to all this, I am disposed to add relapses more frequently repeated, although less severe than those which follow after the mercurial treatment.

Still I trust that this line of treatment will not be hastily given up. And here I may be allowed to express a sincere hope that those surgeons who continue to employ it will direct their attention to the following points, viz., for what symptoms, or combination of symptoms, or conditions of the general health, is this line of practice best fitted? whether it be preferable in warm weather, or in what season it is most likely to succeed? But, above all, I trust that they will turn their attention to the natural history of the venereal disease, and thus furnish the profession with what is so great a desideratum, and one so difficult to attain, as long as the mercurial treatment alone is employed. Let not the spirit of enquiry be biased by any rivalry between the two plans of treatment. Let not the non-mercurialists try to advance their cause by depreciating the mercurial treatment. Neither plan is entitled to the praise of *cito, tuto, et jucunde*. Further observation is required to improve each, and give them some claim to the above character.

While the non-mercurial plan appears to have rather retrograded of late in public estimation, I am yet aware that equally strong objections may be urged against the mercurial treatment; for it may be said that this medicine has been employed in the cure of syphilis more universally than any other medicine, for ages past,

and yet at this day it must be admitted that many cases have resisted its use; and still further, that often where it did not cure it considerably aggravated the sufferings of the patients—and this, although mercury has obtained the title of a specific for the venereal disease. But I think much may be said in vindication of mercury.

Hitherto, and indeed at this very day, surgeons have been very unreasonable in their expectations of the powers of mercury. No doubt many weak minds, misled by a name, have thought if they administered mercury, which is considered a specific, they must cure the venereal disease. Yet it is strange that men have dealt more justly with other specifics; thus Peruvian bark is looked upon as a specific for the cure of intermittent fever, and it will, if judiciously administered, succeed in a great majority of cases of this disease; but still all must allow that this specific may not only not cure, but may aggravate this disease, and even induce others of a more dangerous nature—if, for instance, it be given when the stomach and bowels are loaded: the same unfortunate result will also follow its use, if it be given at an improper period, *ex. gr.* during the paroxysm. Or, again, if it be directed in doses unfit in point of quantity, it must be acknowledged that it has failed; thus, if given in very small doses, it will prove unequal to arrest the progress of the disease; or, if given in excessive doses, it will derange the stomach, so that this organ can no longer retain it. I need not add, that this specific must also fail if it be administered when the constitution has been much broken down, and when a material derangement of structure in any important viscus has been induced by the long continuance of the intermittent fever. Now, when we come to recollect that the intermittent fever is a disease pursuing a single and regular course, we must see how much more easy it is to lay down plain and simple rules for its treatment, than we could do for a disease so complicated as syphilis is. Again, although Peruvian bark is, in intermittent fever and some few other diseases, an useful and effective remedy, yet we know that it is not possessed of such active powers over the animal body as mercury is; and therefore, that, when mismanaged, it will not be productive of as much mischief. Let us not impute to mercury more evils than those which really belong to it: let us draw a distinction between the judicious use of this powerful medicine, and the mal-administration of it. When we recollect how very universal the venereal disease is—how very numerous its symptoms in every one of the stages of this disease—how strangely these symptoms are modified by the habit of the patient, or by accidental circumstances, *ex. gr.* by inflammation; when we call to mind the astonishing powers of this medicine over the animal economy; and when, in addition to all these considerations, we reflect upon the immense number of injudicious, ignorant, uneducated persons, who fearlessly and constantly venture to undertake the treatment of syphilis by mercury, surely the wonder should be that it has not done infinitely more mischief in such hands. Surely

mercury is not chargeable with all the mischief done by the ignorant, who presumed to direct so powerful an engine. We see every man who has the slightest connection with medicine, from the hospital and dispensary porter up to the presidents of the College of Physicians and of Surgeons, prescribing mercury for the cure of lues venerea.

In my opinion, nothing can more clearly establish the claims of mercury to be considered as a *specific* for this disease, than the frequent instances of cures made by it in the hands of those who must employ it at random—and very frequently on patients as careless and incautious as the prescriber is ignorant and pretending. It is wonderful that an engine so very powerful could have been so long wielded by the hands of the inexperienced, the injudicious, the uneducated and unprincipled, and yet should not have committed much more havoc than it has done. Mercury is either a valuable medicine, or a dangerous poison. I trust that hereafter the profession, at least, will no longer be misled by a name; and suppose, because the remedy they employ is entitled a specific for syphilis, that on that account they have only to exhibit it in certain doses, and that they must thereby effect a safe and permanent cure. Let the actions of this medicine on the system at large, and on the various parts of it, be diligently studied; let the very earliest indications of its agreeing or disagreeing with the system be investigated and made known; let the doses and forms of this medicine be suited to the state of the symptoms, and to the conditions of the general system; and then I am convinced that this medicine will rank high among those which restore to man the invaluable blessing of health. Should mercury, when administered according to the above suggestions, be afterwards subjected to the same obloquy which it has lately experienced, I would then think that Mr. Hunter was correct in saying—“Nothing can show more the ungrateful and unsettled mind of man, than his treatment of this medicine.”

PART II.

ON THE USE OF MERCURY IN AFFECTIONS OF THE NERVOUS SYSTEM.

Every surgeon who has been engaged in the practice of his profession during the last twenty years, cannot fail to have remarked the following fact—viz., that, during that period, mercury has been applied much more frequently to the cure of certain diseases than it formerly was, although its powers over these had not been previously acknowledged. How to account for the increasing partiality to this medicine for the cure of other diseases, while its use in venereal complaints, for which it had so long been considered a specific, has within the same period of time been by many practitioners objected to, and by some totally abandoned, is a problem not easily to be solved. This, which is almost a paradox, I cannot attribute to mere fashion or caprice: were I to offer any conjecture upon this point, I should say, that in the treatment of the Walcheren fever this medicine evinced such salutary effects, and such superior efficacy to any other of the various remedial measures that were resorted to, during the prevalence of that severe and too often fatal epidemic, that some surgeons became disposed (almost unconsciously) to ascribe to it some very peculiar and very superior powers; and were thus prompted to employ it in the treatment of those diseases in which it had not hitherto been used, at least to any extent, and in which the various remedies in ordinary use had been generally found ineffectual.

It is not my intention, at present, to treat of the application of mercury to those acute diseases in which it now is, and long has been, freely and successfully employed: for example, in iritis, and in acute inflammations of various membranes, peritonitis, pleuritis, synovitis, &c. The concurrent experience of all practitioners has so fully justified the high reputation of this medicine in these acute complaints, that I shall not dwell upon this point, nor attempt to enforce, by any examples, a truth which is now so generally admitted.

I now merely wish to report the result of my own experience, as to the efficacy of mercury in some classes of disease, in which, as far as I know, it has hitherto been but seldom, and even then but sparingly employed. I allude to certain derangements of the brain and nervous system, sometimes accompanied with more or less of paralysis of the voluntary muscles. In these diseases I consider mercury, when actively and at the same time judiciously administered, to be a most invaluable medicine.

This position, I think, I can best establish by a brief statement of a few cases, which I have selected out of several that have fallen under my own immediate observation.

CASE 1.—In the year 1810, I was requested by a respectable

apothecary in this city to visit a young gentleman, a near relative of his, who had been attacked about three months previously with hemiplegia. I attended him every fourth day during three weeks; his complaints were becoming rapidly worse, and indeed his condition was most alarming. He was reduced to a state of great debility; he could not stand; he passed the entire day in the recumbent posture on the sofa; he burst into tears whenever he was spoken to; his urine and fæces passed involuntarily and unconsciously. I scarcely thought he could survive many days, unless some successful effort were made for his relief.

I suggested to his relative a trial of calomel, to be administered so as quickly to induce ptyalism. This plan was put in execution, and in four days he was in a state of salivation. In less than a week from this, he was able to walk with the assistance only of one crutch. The bladder and rectum regained their retentive faculties. In the course of a fortnight he was considerably improved in every respect; his intellects and strength of mind were perfectly restored.

I may add, that he still lives, and enjoys perfect health and happiness in the midst of a young family. The hemiplegia, however, still remains, and, I conclude, will remain to the end of life.

CASE 2.—In April, 1834, I was called into the country to a near and very valued relative who was seized with hemiplegia, a gentleman about sixty years of age, and of a very full habit of body. He had been always very temperate in regard to drink, but he had indulged very fully a remarkably good appetite, and he used but little exercise. For some weeks previous to this attack, he had the usual premonitory symptoms: before I had seen him, he had been bled largely and purged freely. I recommended the use of calomel, with the view of exciting ptyalism; in three days this effect was accomplished, and it was maintained for nearly three weeks; by this time the powers of the limbs were gradually restored; and, at present, the recovery is so far complete that no eye could discover the slightest paralytic affection of the leg. He can walk with as firm and quick a step as ever. The upper extremity, also, seems to have regained its wonted power; he can employ it in any vigorous exertion, or laborious occupation, as effectively and with as little fatigue as the other arm; but still one defect remains in it—namely, he is not always certain of catching or of holding a small object, such as a pin or needle. However, as far as regards all the ordinary business of life, both limbs may be pronounced recovered and well. No paralytic affection of the face remains; no distortion or twitch can be observed in laughing, or in the expression of any emotion of the mind; his intellects, too, are perfectly clear, as some late productions from his pen, on political subjects, abundantly testify.

CASE 3.—December 19th, 1833. I this day saw (in consultation with Mr. Corr, a surgeon in this city) Mr. H., who had been, within a few days, attacked with paraplegia. Mr. H. was a young man of intemperate habits. The paralysis was recent, and was

rapidly increasing; he could not stand steadily, for any time, without support; nor could he walk even from one side of his bed to the other without the greatest difficulty, and without clinging to the bed-posts.

Mr. Corr and I agreed to try the effects of mercury, given so as to induce a speedy salivation. We therefore directed him one grain and a half of calomel every fourth hour.

December 24th. Mr. Corr informs me that Mr. H. is now in a smart salivation; and that he is so much improved as to be able to walk through his bed-room without assistance, or without laying hold of any object within his reach. He was now directed a blister to the nape of the neck, and the ptyalism to be maintained.

In the course of a short time Mr. H. recovered the perfect use of his limbs, without any other remedies except occasional purgatives.

He is now in excellent health, and a remarkably active man, and even practises certain feats of agility—such as, while holding his hands behind his back, jumping upon a sofa and down again, in rapid succession, and without turning his person round.

CASE 4.—The following case was in Steevens's Hospital, and excited so much interest and attention that I feel certain the pupils of that day cannot readily forget its particulars.

—Mooney, a young woman, admitted during the winter of 1835, labouring under almost total paralysis of every limb. She was scarcely able to stand, and totally unable to walk; her upper extremities, also, were in the same useless and helpless condition. She states, that a few weeks previous to her admission into this hospital, she had been in the Whitworth institution for a severe fever; that she left that hospital in a very weakly condition, and in a very delicate state of health; she then went into uncomfortable lodgings, where she was necessarily exposed to many privations, and where she found not only her general health to decline, but she also experienced a sense of numbness, and a peculiar weakness and loss of power in all her limbs: these sensations have daily increased, to the present date of her admission.

I immediately resolved to try the active mercurial treatment in this case, and directed calomel in such a manner as to induce a speedy and a smart degree of ptyalism. The effect of this treatment, in this case, was most striking: ptyalism was induced in the course of three days, and, coincident with it, there was observed a great improvement in all the symptoms; the limbs, in particular, were benefited; the sense of weakness and loss of power in and control over them were speedily diminished; her strength returned, so that she was soon enabled to walk—feebly and unsteadily, no doubt.

The ptyalism was maintained, steadily and prudently, for some time. Her head was directed to be shaved, and rubbed with tartar-emetic ointment: this application she, from her anxiety to recover, used too freely, and for too long a time; in consequence of which, sloughs formed in different parts of the scalp, and the ulcers caused

by these were slow and difficult to heal. When the ptyalism had been continued for about a fortnight, it was allowed to subside; and, although all paralytic symptoms had disappeared, yet, as some peculiar debility as to particular motions, or in some particular muscles, still remained, strychnine was prescribed. Under this medicine, and afterwards tonics and generous diet, she was gradually restored to strength, and was discharged in perfect health.

CASE 5.—October 3d, 1836. Mrs. B., of Rathmines, æt. 50. For nearly the two last years this woman has suffered many severe family afflictions, and considerable loss of property; in consequence of which, as she thinks, she has become subject to what she terms “great confusion in the back of the head,” which of late has extended to the right side of the head also. She has latterly avoided all society, and has sought for solitude. At the same time she observed a failure of memory, which, within the last six weeks, has increased considerably, so that now she cannot find words to express her ideas. If she chance to lay a key, or any other thing, out of her hand, she cannot, in a minute after, recollect where she had placed it. She is unable to read, as the attempt instantly brings on the “*confusion* in her head;” if she attempt to recollect any thing, it all ends in the same confusion; nor can she even attempt to do any needlework, as this would be followed by the same distressing sensation. Her temper has become extremely peevish and irritable; she suffers from a constant sickness of stomach, like sea-sickness. When she attempts to walk she staggers, as she says, in consequence of a dizziness in her head, yet she can walk in a dark room; nor is she alarmed by looking down from a height. Her appetite is good; the bowels are very costive; she sleeps very heavily; there is no emaciation; pulse 96.

I determined, in this case, to try the effect of ptyalism; and, having premised a strong purging draught, directed “Calomel gr. iij. bis in die.”

October 7th. She has had a slight attack of mercurial dysentery yesterday, with some soreness of the mouth and gums; she describes what she terms “the confusion” in the back of the head as being much less; there is a decided improvement in her memory; she can now much more readily, and more constantly, find the words to express her ideas. She has some sickness of stomach, but different from that kind of sickness she has so long suffered.

October 10th. She can now read and attend to figures, and can even cast up an account, which she could not previously attempt to do; but still she feels she would become confused if she attended to them beyond a very short time. Habeat “mist. c. quin. sulph. gr. ij. ter in die.”

October 18th. Whenever she stoops, or turns about her head suddenly, she feels a sense of confusion, and then a *pain* in the head. Her sleep is less heavy, and much more refreshing; she can now read as much as twenty pages of a book at once—she takes an interest in it, and can recollect what she has read. Says she feels as if some great weight had been lifted off her; ptyalism was

still maintained by occasional doses of mercury. *Habeat ung. ant. tart. vertici capitis.*

October 24th. Pustules have been produced by eleven applications of ointment. She can now stoop, and look up suddenly, without any unpleasant sensations; her memory and spirits are improving; she can now attend to her household affairs, and can recollect what she has to do.

November 3d. She now reads with interest, and recollects what she has read a week before; her temper is still very irritable, especially if hurried; her spirits are much better in the latter part of the day; in the morning she feels very nervous; jolting of the car makes her head still feel a little giddy.

November 13th. She feels much improved in every respect; she becomes fidgetty and uneasy at 10 P. M., before she goes to bed;—this is the principal nervous uneasiness she now experiences. She feels her temper much improved since the scalp has healed.

November 16th. She walked from Rathmines to my house, upwards of a mile, this day, and feels no inconvenience except a very slight giddiness. Her sleep is now refreshing and natural; her temper much improved; she now does not suffer from confusion when she is hurried.

I observed, that during the entire treatment her bowels required very active purgatives, the uneasy feelings in her head uniformly becoming aggravated by costiveness.

CASE 6.—On May 12th, 1836, I received from my friend Mr. Pierce, surgeon of the King's County Infirmary, a letter relative to the state of health of Mr. Elcot, which was handed to me by the patient himself. In this, Mr. Pierce mentions that this man's habits of living had been irregular—his occupation as a farmer and cattle-dealer having obliged him to attend fairs, at great distances from home; and there, from exposure to wet and cold, Mr. E. said he could not avoid often resorting to the use of ardent spirits, as he fasted during the entire day, from an early hour in the morning till late at night. He applied to Mr. Pierce on account of anasarca, accompanied with diseased liver. By the use of calomel, digitalis, and squills, pushed so far as to induce a slight ptialism, these complaints were removed. In a very few weeks afterwards he again applied to Mr. Pierce, with the following symptoms: "an unsteady gait when he walked into the room; a considerable inclination of his body towards the left side; and, in progression, a deviation towards the left from the course he wished, or which I desired him to take; along with this, a most striking alteration in his countenance. The left eye seemed as if sunken in the orbit, with ptosis of the lid; a languid and vacant cast of countenance; added to which was an obvious inattention to and neglect of personal cleanliness; he was inclined to remain always in bed; his urine was passed frequently, with difficulty, and in small quantities."

Such was the state of this man when he called upon me with Mr. Pierce's letter, some days after it had been written; and then I observed that his intellects had in some degree suffered; his

memory was much impaired, and he seemed almost perfectly indifferent to every thing around him. I feared he was likely to fall into a state of fatuity.

I advised that mercury should again be applied, and pushed so as quickly to induce a smart ptyalism; that then the top of the head should be rubbed with tartar-emetiic ointment; and, on the subsiding of the ptyalism, that he should take strychnine.

In August, 1836, I had an opportunity of learning, by a letter from Mr. Pierce, the result of this plan, and of again seeing Mr. Elcot. From Mr. Pierce's letter I learned that ptyalism had been induced in the course of seven or eight days; that the symptoms appeared to show some improvement as soon as ptyalism was established; that, on the subsiding of the ptyalism, he was directed to take one twelfth of a grain of strychnine three times a day, and to have tartar-emetiic ointment rubbed on the top of the head; and that the effects of the strychnine were most satisfactory—a most decided improvement having taken place in his limbs, his intellects, and countenance.

I must say, that I seldom enjoyed more pleasure than in seeing Mr. E. walk into my study, and finding him give such a satisfactory account of the improvement in his health. Still he admitted that his urinary complaints distressed him a good deal; that he frequently suffered from incontinence of urine, although he was able to pass half a pint of urine at a time.

I also learned, from his sister, that he was still inclined to remain in bed all day; and that he had a great aversion to walk, or to use any kind of exercise. On examining his abdomen, I felt the bladder distended, and as hard as a foot-ball immediately above the pubes. I drew off the urine; and repeating the operation again, after an interval of three days, I found that the bladder had now regained the power of emptying itself completely. His sister remarked a very decided improvement in his habits, from the day I first drew off the urine; that he walked out every day since, and remained for a considerable time in the open air each day.

The three succeeding weeks he passed at the seashore, near Dublin, and he improved considerably in every respect.

Since his return to the country, I find his improvement has been equally progressive; as in a letter from Mr. Pierce, of the 11th of September last, he states—"I should have written to you before relative to Mr. Elcot, who, I am happy to say, continues to improve in health and strength. He is, I am credibly informed, this very day attending the fair of Banaghar, which is a distance of seventeen miles from his residence.

CASE 7.—John Brady, æt. 30, a publican, admitted into No. 3 ward, on the 26th of October, 1833, under the care of Mr. Colles.

His right lower extremity is paralysed; the left is very weak, and bends under him; he has a sensation of coldness in it, and a stinging pain shooting up from the instep and foot. The urine flows from him involuntarily when in bed; but whenever he sits up, and tries to make water, he experiences great pain just before

doing so—a sensation as if the bladder was over distended, and he has to force very much; there is a white powdery sediment in the urine. He has, also, a feeling of weakness and pain in the small of the back. His appetite is pretty good; he has no thirst; he perspires very much at night; pulse 100.

He states, that on the 1st of September last, after exposure to cold and wet, by sitting up for seven successive nights to protect his tent in Donnybrook fair, he was attacked with a profuse diarrhoea; after which he had a sensation of being stung with nettles in the lower part of the body and in the thighs; then a numbness in the right leg, which was growing weak—so much so, that on the 15th of September, three weeks from the commencement of the attack, he was obliged to use a stick in walking; and he felt a slight pain shooting from the foot up the right leg; also a weakness in the loins, and pain, which prevented him from stooping. He had also a difficulty and delay in making water, which gradually increased, and amounted to a complete retention of urine on the 20th of September, when the water was drawn off for the first time. He was now received into Sir P. Dunn's Hospital, when he was given some pills, during the use of which he was enabled to make water; he was also acupunctured, but without benefit. On the 15th of October he got incontinence of urine, and about a week before admission into this hospital he had completely lost the use of the right leg.

When admitted into Steevens's Hospital he incontinence of urine continued unabated; he had lost the power of both lower extremities, so that he was unable to stand at the bedside, unless he were held up by a strong man; but he said that the right leg was weaker than the left. He has a sensation of coldness, and stinging pain shooting up the limbs from the feet; he also complains of weakness and pain across the loins. His appetite is pretty good; has no thirst; he sweats profusely at night; pulse 100.

November 1st. R. calomel gr. iss. pulv. Doveri; pulv. Jacobi, aa. gr. ij. ft. pil. ter die.

6th. He is now able to retain his water, but has still difficulty and forcing in making it. R. cal. gr. ij. pulv. Jacobi; pulv. ipecac. aa. gr. ij. ft. pil. ter die.

9th. Has retention of urine: the left leg does not now bend under him when he rests upon it. Rep. pilula.

12th. He has no longer retention of urine; the power of motion is returning in the right leg; his gums are sore, and salivation is established. Omitt. pilulas.

26th. his urine has gradually become clear, and he has now no difficulty in making it. He can walk without assistance. Discharged.

September 29th, 1836. This man has continued to enjoy very good health, although he still follows the business of a publican, and drinks rather too freely by his own admission. He called on me this day, and walked into my study with a firm step, not exhibiting the slightest trace of any paralytic defect.

CASE VIII.

My dear sir—I have great pleasure in sending you the case of Mr. ——. Mr. — is now about 30, of a fair florid complexion, with light hair. In childhood he was very subject to severe attacks of croup: during boyhood, and until he entered college, he was seldom free from headache, for which Dr. Cheyne was consulted, and which were only relieved by repeated cuppings on the back of the neck, and leechings. During his college life he enjoyed good health, and a perfect immunity from head complaint; he became very full and corpulent, and was remarkably strong and athletic. Some time after he obtained his degree, he had frequent attacks of slight fever, with headache, which generally confined him to bed for three or four days, and always ended with profuse perspiration; still his general health was good, and his habit full and plethoric. In the September of 1832, he was suddenly attacked, while walking, with a severe epileptic fit; this was his first: the only treatment he then received was a general bleeding, aperient medicine, and a more abstemious regimen, with regular and constant exercise. He went on well for some months; but, in February, 1833, he had another epileptic seizure; after which, by the advice of Mr. Crampton and Dr. Marsh, a seton was put in his neck, and he was ordered the nitrate of silver, which he took for eight weeks, to the amount of two grains three times each day; regimen and exercise were more strictly observed, and he was particularly enjoined to sleep very little. After this he continued without any return of absolute fit for twelve months; but he became more subject to those attacks of feverish cold, attended always with headache; and, he remarked, he found it very difficult to keep his bowels open. The seton was then taken out of his neck, and there was no particular symptom to create alarm, until the winter of 1834, when, after being exposed to fatigue and cold, he began to complain of his limbs becoming numbed and stiff; he found a difficulty in getting up stairs: he could not run or leap; his right leg was weaker than the left; he felt, when on horseback, that his legs, from his knees down, were numbed and that he had no power over them; for this he was ordered friction, warm baths, blisters to the sacrum, cupping on the spinal canal, an issue in the nape of the neck, and electricity, from all of which he derived little or no benefit; his limbs became weaker, he found a difficulty of passing water, and an inability of emptying his bladder, and his headaches came on at shorter intervals.

In the summer of 1834 he had another epileptic fit; and in the autumn of that year his symptoms were, an evident drag in the right leg, and great weakness of both; inability to walk more, or so much, as one mile; occasional loss of vision, amounting in some instances to total blindness for days; slight squinting; complains of a constant pain and weight in the vertex; occasionally of suddenly losing the use of his right hand and arm, and recovering it again after some time; micturition more difficult. At this time it was agreed,

in consultation with Mr. Crampton, Dr. Marsh, and Dr. Colles, to put him fully under the influence of mercury; for, although he had often taken it partially as a purgative, he had never taken it so as to affect his system. He commenced early in December taking two grains of calomel, with one of Dover's powder, three times each day, and continued it for three weeks before it had produced active ptyalism; from that period he lost all headache, never complained of any defect of vision, his spirits (which before had been gloomy and desponding, with a great dislike to reading, study, or any exercise of his memory whatever) became after that very good; had less inclination to sleep in the evening, was fond of reading, found his memory again quite restored, and he began the study of German, preparatory to his traveling in the ensuing summer. His limbs still continued weak, and he had not lost the drag in the right leg.

In the summer of 1836 he went up the Rhine, and found great improvement in his limbs by the baths at Baden; and, since, he writes to say, that he has been into Italy, by Switzerland, and has traveled seven hundred miles, over bad roads, most of which he has walked.

Such, dear sir, is his case; exhibiting, I should think, in the strongest light, the beneficial effects of mercury in cerebral disease.

From an impartial consideration of these cases, I think it may be fairly deduced, that mercury is entitled to be classed amongst our most powerful and valuable therapeutic agents, in those morbid affections of the nervous system, which admit of any remedy or relief from the healing art; I say, admit of, for it must still be conceded that, of all complaints that come under the notice of the practitioner, none are more obscure in their nature, and uncertain in their issue, and generally none are more obstinate in resisting every remedy that is applied for their relief, than those in which the functions of the nerves and muscles are deranged.

I shall refrain from offering any theory, or attempt at explanation, of the *modus operandi* of mercury in this class of diseases; partly because we are totally unable to do so, in reference to other diseases in which its influence is still more marked and obvious, and in which its power over disease is almost certain and unerring, or specific; but, principally, I abstain from offering any theoretical observations whatsoever, because the class of diseases to which I have alluded, are, as regards their pathology, involved in deep obscurity. Even at the present day we possess but little exact knowledge of the structure or function of the various parts that compose the nervous system; how then can we venture to theorise as to the nature or the cause of its diseases? How are we to discriminate between a functional derangement in its mysterious powers, or an organic lesion in its delicate, and (as yet) unexplored tissue?

No doubt, in many instances, the impaired function may depend on some organic change in the nervous fibre, or in some of the

effects of inflammation in its investing membranes, and a suitable treatment be hereby indicated; but I fear that, in a vast majority of cases, no such connection can be ascertained as that between cause and effect; and that we must remain contented to pursue a mode of practice, which, though it be empirical, inasmuch as it rests on no just reasoning, is yet sanctioned by analogy, and fortified by experience.

I shall not trouble the reader with any detailed account of the benefits derived from mercury, in cases where derangements of the stomach are dependent on organic diseases of that, or of some neighbouring viscus.

The following case of gastrodynia, which was one of the most severe I had ever witnessed, shows the great benefits to be derived from the use of this medicine, in a case where the most strict and repeated examination could not detect any organic affection of any of the abdominal viscera. The subject of it was a farmer, æt. 34, in rather comfortable circumstances, of full habit and florid countenance, with every appearance of perfect health. He was received into the hospital on the 24th of September, 1836: he stated, that he was a man of temperate habits, but, from his occupation, was much exposed to wet and cold. This disease commenced about twelve years ago. Whenever he used any green vegetable food for dinner, he was attacked on the following morning with a peculiar squeezing pain in the stomach, as if (to use his own words) the stomach was squeezed between two rollers; this pain gradually increased for an hour, when it at length became almost intolerable; he then vomited, and threw up sometimes a greenish thin fluid, of very acid taste; at other times, a whitish fluid, like the white of an unboiled egg. The difference in the quality of the fluid vomited, did not depend upon any particular kind of food. After the vomiting, he felt quite relieved and perfectly well. As the disease advanced, he found that salted meats and eggs produced the same effects; and that the pain came on much earlier after the meal: at this time he remarked, that change of air agreed with him, and that wet and cold greatly aggravated his sufferings. He next found that when the pain seized him, he was not able, by a natural effort, to discharge his stomach; and with the view of relieving himself from the pain, he would then excite vomiting by thrusting his finger far down into his throat: this expedient after some time failed him, so that he could not, even by this means, provoke vomiting. He now discovered that he could still excite this act, if he first drank large quantities of boiled milk, so as to over-distend the stomach, and then introduce the finger in the manner before mentioned. The milk thrown up was completely changed into a curd. He says, that the quantity of milk he used on these occasions generally amounted to two gallons; and this he always had boiled before he used it. Within the last two years the pain has increased greatly in severity, and comes on after any kind of food; but he thinks it more severe after eating vegetables or eggs. Pressure on the stomach procures some slight mitigation

of the pain; and he has sometimes found relief by lying on his back upon the cold pavement.

He handed me the following communication, from Mr. Cane, a very intelligent surgeon, practising in the city of Kilkenny.

September 20th, 1836.

Sir—The bearer, Mr. Walshe, was a patient of mine about twelve months since, for gastrodynia of the severest character I have witnessed. Since then I had nearly lost sight of him, until this day, when he applied to me to state in writing what I had then done for him, as he wished to consult you, for he is still suffering as severely as ever. I have no notes of his case, but have a tolerable recollection of his very great sufferings, and the remedies applied.

He was cupped repeatedly, rubbed with the tart. ant. ointment, and blistered over the epigastric region; he got calomel and blue pill occasionally, and the carbonate of soda in inf. quassiae daily. Cupping gave temporary relief; the other remedies none. He was then put upon sedative treatment: he got the acet. morphiae, and had a belladonna plaster over the stomach; these failed: he afterwards took the muriated, and then the acitaded tincture of iron daily, with gentle aperients at night; all which failing, prussic acid was tried, and this with as little good effect; creosote increased his sufferings. At length he grew tired of medicine, and the restrictive diet which accompanied its use, and withdrew from my care. Since then, he says, his sufferings have been rather increasing; and he expresses the agony he now endures, to be so great that he desires death.

I have the honour to remain, sir,

ROBERT CANE.

To A. Colles, Esq. M. D. &c.

September 24, 1836. I ordered for him R. aq. calcis ʒvi. magnesiae ʒss. spt. amm. arom. ʒij. m. sumat ʒi. ter in die. Alternis noctibus sumat pil. aloeticas duas.

October 4th. He passed the three first nights, after commencing this medicine, perfectly free from pain; but has since passed three or four nights of most severe suffering. R. pil. hyd. gr. iv. ext. hyosciami gr. i. fiat pilula ter in die sumenda. Repet. mist. c. aq. calcis, &c.

October 9th. Repetantur pilulæ et mist. R. tinct. acet. opii gutt. xx. aq. font. ʒvi. m. ft. haustus urgente dolore sumendus.

October 18th. His mouth has been smartly affected the two last days. Omitt. pilulæ; repet. alia.

October 28th. He has not had any return of pain for the last ten days; appetite very good; mouth is yet slightly sore. He imagines himself perfectly cured, as he has had such a long immunity from pain. He is most anxious to return to his farming business, and cannot be prevailed on to remain longer in the hospital.

Being anxious to learn whether this man continued free from this severe affliction, I wrote to Mr. Cane, who was so kind as to favour me with the following communication.

November 18, 1836.

Dear sir—I have seen Walshe, and he has furnished me with the following particulars. The night he left the hospital, and the following day, when he traveled outside upon the coach to Kilkenny, he felt some slight return; since leaving Dublin he has had no attack *by day*; but is attacked, very *slightly*, however, about twice a week, but *at night only*. He has had vomiting but once, and that after having eaten of stewed goose. He complains of some uneasiness in the region of the stomach, occurring after even slight exercise; and, also, that his nights are restless. He has a clean tongue, good countenance, pulse 78, and regular; has no tenderness upon pressure over the epigastric region. On the whole he is, he says, *well, comparatively to what he was*, and that the pain he now suffers occasionally is quite trifling, and not at all to be compared to his former agony. He uses no vegetables, his bowels are free, and he continues to take the medicine which you prescribed for him.—Mist. aq. calcis c. mag. &c.

There is no question that he has derived great benefit from your treatment, though he says “he was near losing his teeth by it.”

He is much better than I had hoped ever to see him. It will afford me much pleasure, at any time, to reply to any enquiries which you may be desirous to make concerning him.

I remain, dear sir, yours truly,
ROBERT CANE.

In case of obstinate ulcers of the extremities, where no suspicion of venereal taint could be entertained, I have occasionally at length effected a cure of the ulcers by administering mercury, so as to excite ptyalism, using still the same dressings which had been for a long time previously employed in vain.

I deem it unnecessary to mention here, what every practising surgeon must be familiar with; viz., that mercurial fumigations, applied directly to ulcers, often prove a ready means of causing them to heal, although they may have previously resisted a great variety of topical remedies. I shall only beg leave to record my experience of the superiority, for such purposes, of the sulphuretum hydrargyri rubri, and beg to refer the reader to page 36 of this work, where a most satisfactory and manageable mode of employing this article, for fumigating any particular part, is fully described.

The following case will prove, most satisfactorily, that mercury may be employed with the greatest benefit, in some cases of ulceration, which had long resisted almost every other treatment.

August, 1835. In the beginning of this month I was consulted by Mr. S., on account of an ulcerated tongue; his speech was by it rendered very indistinct; he had a flow of saliva from the mouth; he suffered but little pain, and was apparently in good general health. Besides the affection of his tongue, he also complained of epiphora of the right eye, with an obstruction in the right nostril, from which, by blowing the nose, hardened crusts, of amber colour, were occasionally thrown out. On the back of his

neck was a pretty large ulcer, not very deep, and having callous edges. He informed me, that he had laboured under ulceration of the throat, &c. for many years; and that, in April, 1832, I had seen him, his throat being ulcerated, and the ulceration having extended to the tongue; and reminded me, that I had paid him two visits at the time that the tongue was first attacked; that I had directed for him, at that time, pills of calomel, which he did not take for more than five or six days. On referring to my notes, I found that I had seen him at the time he alluded to; that I had directed for him the mercurial pills, and that he did not seem satisfied when he learned the description of the medicine I had ordered. Since that period he has been treated, by different surgeons, with *corros. sublim.*, and with almost every other kind of medicine: topical remedies without number, many of them caustics, have been applied to the tongue. He informed me, also, that shortly prior to my first visits to him, in 1832, his wife was delivered of a child, which has been remarkably healthy. He has not had any eruption, or pains in the bones; but his throat was a long time severely attacked. On looking into it I observe, on the right side, the velum adhering to the back of the pharynx, and the cicatrix bears evident marks of a former very severe ulceration of the fauces. I ordered him *pil. hyd. gr. v. sing. noct. ung. hyd. fortis ÷i. om. noct.*

August 13th. Mouth slightly, but uniformly, affected by the mercury; the flow of saliva much reduced; the right nostril more comfortable; epiphora less; the ulcer of the tongue has made considerable advances toward healing; the swollen edges of the ulcer less elevated; his general health is undisturbed by the action of the mercury.

August 19th. His articulation is much improved; the swelling and hardness of the tongue, in the vicinity of the ulcer, much reduced. The ulcer now does not exceed the size of a split pea. The eye and nostril much better; mouth pretty sore. *Repet. pil. et ung.*

September 5th. The tongue is quite healed, but is in some degree confined in its movements by the cicatrix, which connects it to the floor of the mouth; The flow of saliva has ceased; there is not the slightest weeping of the right eye; he feels the nose better, but still some crust of hardened mucus is blown down every day; the mouth not too much affected.

He did not desist from mercury until the beginning of October, at which period I considered him as perfectly cured.

Few surgeons, extensively engaged in practice, have escaped meeting with cases of this chronic or scrofulous ulceration of the throat; and all know that this may exist singly, or it may be combined with a similar affection of the mucous membrane of the nose, which is by no means a case of rare occurrence. In more rare instances the ulceration spreads forward along the tongue.

The case above detailed is an instance of a combination of all these affections at once, and exhibits the disease as continuing for a period of at least eight or nine years. When I first advised mer-

cury for the cure of the throat, which had long been ulcerated, and of the tongue, which had only recently been attacked, I deemed the case much more favourable for its use than I found it on his last application, when the disease had obviously spread to the nose; for I need not say that, even in the venereal o \ddot{z} æna, mercury is generally not capable of preventing most serious havoc being made in that organ; but, in the present case, it has succeeded to the utmost of my wishes.

A few days ago I saw Mr. S., and found him in excellent health, and very much improved in flesh and complexion. He assured me that he then enjoyed a degree of good health to which he had for many years been a stranger. The tongue and throat remained perfectly healed; and not the slightest trace of any affection of the nose could be discovered, or even suspected.

Whether we consider or call this disease a scrofulous ulceration, or merely an obstinate ulcer, one thing is plain, that it was cured by a moderate ptyalism, although it had for eight or nine years previously resisted, I believe, every other mode of treatment, both local and constitutional. By adducing this case as an instance of the value of mercury, in causing obstinate ulcers to heal, I do not mean to say, or insinuate, that it will, in all cases of this ulcerated state of the throat or nose, be equally efficacious; for I am well aware that, in a great proportion of such cases, we have to contend with a very morbid state of the general system,—one which is not likely to be remedied by mercury. But this much I will say, that in cases of this description, where ulceration is spreading to and threatening the destruction of important parts, we may fall back upon mercury as our last resource. I think, too, that the local application of mercury directly to the ulcers may be of superior advantage, especially if used in the form of fumigations; but, on this subject, I speak from a very limited experience.

I should, when enumerating the various remedies formerly employed in this case, have remarked, that he had repeatedly taken mercurials, especially hyd. corros. sublim.

I am well aware that many cases of this chronic ulceration of the throat have been treated, both by regular practitioners and by empirics, with solution of corrosive sublimate; and that, in some instances, the practice has been attended with success—more frequently, I believe, when the doses of the medicine have been very small. But, if I can judge by the cases which have come under my observation, this treatment has been much more frequently unavailing than successful.

If what I have said, of the use of mercury in scrofulous habits, prove to be well founded, we shall then, with some degree of confidence, resort to mercury, pushed to ptyalism in obstinate cases of this affection of the throat, even when accompanied, as it sometimes is, with enlargement of the cervical lymphatic glands. I need not add, that we should, in such cases, strictly observe the rule to apportion the doses of the medicine to the state of the general system of each patient; avoiding, as most dangerous, the error

of administering it in doses too great for the constitution of the individual.

We not unfrequently meet with chronic tumours in the abdomen, varying in size from that of an orange to that of a foot-ball; these tumours are movable, and are generally productive of some uneasy sensations, or of some slight derangements in the function of digestion. These tumours often continue in an indolent state for years together; but, at times, they may be affected with some degree of uneasiness, and even of painfulness. When these tumours get into this state, we are called upon to use the most active means for removing it, and restoring them to their original quiescent state. General blood-letting, where it can be borne, and in more delicate habits local bleeding should precede all other measures. Having premised this evacuation, the employment of mercury, in such manner as to induce a moderate ptyalism in the course of six or eight days, will be found of the most signal service. As soon as the salivary system acknowledges the action of the mercury, instantly does the pain begin to subside; and, after a few days, ceases entirely. When I say, that if we do not quickly subdue this painful state of the tumour, we shall see it speedily produce considerable enlargement of the tumour, and consequent increase of the preceding distress; which, in most instances, are attended by dropsy, or by irritative fever, diarrhœa, and death; I say, when we contemplate these results, we shall at once be able to appreciate the value of mercury, used in such cases. Yet it must be admitted, that mercury has no influence in reducing the size of the tumour, while it remains in the indolent state. The same remarks apply to that painful condition which occasionally affects ovarian tumours. For here the use of mercury, preceded by general or local blood-letting, not only relieves the patient from present pain, but also prevents the very rapid increase of the tumour, which would otherwise immediately attend this painful state.

I have, with success, employed mercury, both as a local application and a constitutional remedy in some other diseases in which its use has not been generally adopted; but I decline to submit an account of these trials to my professional brethren, as the cases in each disease have been too few to justify us in founding on them any rule of practice.

THE END.

ON

• INVOLUNTARY

SEMINAL DISCHARGES.

BY M. LALLEMAND,

PROFESSOR OF THE FACULTY OF MEDICINE OF MONTPELIER.

Ἡ δὲ τέχνη μαχρὰ . . . ἢ δὲ πικρὰ σφαλερὰ,
ἢ δὲ κρείσσις χαλιπὴ . . .
(Ἱπποκράτους αφορ. τμήμα πρῶτον. Α.)

TRANSLATED FROM THE FRENCH

BY WILLIAM WOOD, M. D.

OF PORTLAND, MAINE.

PHILADELPHIA:

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1839.

Entered according to act of congress by ADAM WALDIE, in the year 1839, in the clerk's office of the district for the eastern district of Pennsylvania.

AUTHOR'S PREFACE.

I have collected, within thirteen or fourteen years, more than one hundred and fifty cases of *Involuntary Seminal Losses*, grave enough to produce serious derangement of the health, and even to cause death.¹

The most of these patients applied to me for *cerebral affections*, that had been supposed to exist for a greater or less length of time. Thus, by a singular caprice, it is to the publication of my *Anatomico-Pathological Researches upon the Brain and its Appendages*, that I am especially indebted for my most remarkable cases of *diurnal pollutions*; and yet I am the very person that has denied the existence of disease in the brain and its appendages in so many cases where it appeared incontestable.

In many other patients it was believed there existed chronic gastritis or gastro-enteritis, aneurism of the heart, commencing phthisis, &c.; or else *nervous affections*, and particularly a *state of hypochondriasis*.

We see, from this brief statement, how frequently seminal losses occur, how grave they are, how difficult to be ascertained, and to what deplorable errors they every day give rise; and already we may foresee that the causes of them are much more diversified than we have before imagined, and that their treatment must often present great difficulties.

The pamphlet of Wickmann, and the commentaries of Sainte-Marie,² are all that we possess upon a disease that degrades man,

¹ MM. Labat, Emile Verdier, and Antoine Marchal, are those among my students who have assisted me with the most zeal and intelligence in the collection of these notes.

² Dissertation upon Involuntary Diurnal Pollution; by Wickmann; translation of Sainte-Marie. Lyons, 1817.

empoisons the best days of his life, and, unperceived, commits great devastations in society; yet the researches of these conscientious observers are almost entirely unknown.

They have, however, made every effort to call the attention of practitioners to a subject, the importance of which they well understood, and they have developed many useful truths. Why, then, have they not produced more impression upon the medical world? Undoubtedly, because they were not supported with a sufficient number of well detailed facts, and, especially, because they were presented in a manner too vague or too general.

Be it as it may, whatever of good Wickmann and Sainte-Marie have said, has not been appreciated; and they have left numerous and important voids to be filled, and more than one serious error to be corrected.

The materials that I possess encourage me to hope that I shall be more fortunate; at all events, I consider it my duty to publish them.

It is, however, for practitioners that I write. They only, perhaps, will feel the importance of so many diversified and minutely detailed cases, and will derive some benefit from them: others must read them with caution, and guard themselves against the influence of their imaginations.

Among those of my students who have consulted me for seminal losses, the greater number were more frightened than diseased.

TRANSLATOR'S PREFACE.

In presenting to the medical profession this work of Lallemand, the translator has been influenced solely by the consideration of its practical importance; and, in this respect, very few, if any, of the late publications can compare with it—treating, as it does, of diseases hitherto almost unnoticed, or, at best, misunderstood by the great mass of practitioners.

With the exception of the works mentioned in the preface of the author, little has ever been done towards obtaining any correct knowledge of the pathology of the diseases in question; and so little importance has at all times been attached to them, that, in the language of Mr. Good, “in almost every system of nosology, they are scattered through every division of the classification, and are rather to be found by accident, an index, or the aid of the memory, than by any methodical clue.” This, though said of all the diseases affecting the genital organs, is strictly true of the particular one forming the subject of this work. Some of the characteristics of it he has described under the name of spermorrhœa, limiting it, however, to the perceptible loss of semen, attended with libidinous desires, and describing, in various parts of his nosology, under a great variety of learned names, the symptoms attendant upon a more advanced stage of the same disease, as *tabes dorsalis*, some forms of apoplexy, hypochondriasis, madness, &c.

If, then, this work is capable of furnishing us with the correct pathology of the various kinds of pollutions, and of throwing light altogether new upon other diseases, for which no rational plan of treatment has ever been devised, it must every where meet with a cordial reception from the practitioner.

It appears to me to be destined not only to effect considerable changes in private practice, but also to do something for the relief of many of the wretched beings confined in the numerous asylums for the insane. In looking over the reports of the superintendent of the State Lunatic Hospital, Worcester, Mass. I find a table showing the relation existing between the cause of the disease and the recovery, where, out of four hundred and seven patients, fifty-five have become insane from the effect of masturbation alone, forty-three of whom are males, and twelve females. Of this number four only are pronounced cured or curable, whilst fifty-one are styled incurable.

Without venturing to assert that the treatment proposed by Lallemand would produce any more favourable results, I cannot but express the hope and belief that it will receive the attention of the distinguished gentlemen placed at the head of this and similar hospitals. We have reason, certainly, to hope that his manner of treating these diseases may yet be successfully adopted for restoring to society a still greater number of the unfortunate beings who are now the inmates of these truly philanthropic institutions.

It is surprising to witness the effects produced by a single cauterisation of the prostatic portion of the urethra, which is here shown to be not only practicable, but a perfectly safe operation. The instrument by which it is effected has not been described or even mentioned in any part of the work now presented to the medical profession; it having been, without doubt, the intention of the author to do it in the second part, treating of these diseases in females, which he has promised to publish as soon as his labours will permit. To supply the deficiency, or rather to render this part of the work more useful, the translator has added to it a description and drawing of the *Porte Caustique* of Ségalas, which is an improvement upon that by Lallemand, and which appears to have been the one used by him, judging from the description, given in the body of the work, of his manner of using the instrument. That invented, or rather improved, by him, instead of being made to revolve rapidly, could not be made to revolve at all; but, once introduced, and the sheath drawn off, the caustic in the spoon or cistern came in contact with but a limited portion of the circum-

ference of the urethra, so that it was necessary to have numerous wires with spoons presenting in different directions in order to cauterise the whole or any given surface; an inconvenience entirely remedied by the instrument of Ségalas. If this is not the one used by Lallemand, it appears to me to possess decided advantages over that invented by him, or those used by Decamp or Velpeau.

W. WOOD.

Portland, Me. Jan. 1839.

OF

INVOLUNTARY SEMINAL DISCHARGES.

CHAPTER I.

EXPOSITION.

Involutary losses of semen present themselves under various aspects, possessing different degrees of importance.

Those which take place spontaneously during sleep, in a robust and continent individual, may be useful by removing from the economy a stimulant which, being duly increased, might disturb the exercise of its functions. They produce, then, an effect analogous to epistaxis, which is so common and useful in the young: but they may become excessive, and outlive the wants of the system from a sort of habit; they are then, like nasal hemorrhage, attended with inconveniences, proportioned to their frequency, abundance, the constitution of the subject, &c.

They may be brought on by an undue excitation of the genital parts, arising from excesses in coition or masturbation. The irritation, persisting in the spermatic organs after the cessation of these excesses, may keep up an excessive secretion of seminal matter, and give rise to precipitate ejaculations, under the influence of erections that are incomplete, and almost unattended with pleasure. In fine, the relaxation of the ejaculatory ducts, which very soon follows this pathological irritation, eventually induces the expulsion of the semen, without the manifestation of the least erection, or the slightest enjoyment: and this especially takes place during defecation or the emission of urine.

The transition between these different modes of spermatic evacuation is sometimes so insensible, that it is impossible for the patient or even practitioners correctly to appreciate it. Besides, very excessive evacuation of semen is capable of producing the same effects upon the economy, in whatever manner it takes place. The different aspects under which seminal losses may present themselves, cannot then be separated, either in theory, or, especially, in practice.

However, venereal excesses and masturbation have already been the subject of careful investigation. I shall cite particularly the recent work of Dr. Deslandes,¹ written with elegance, and full of conscientious researches. *Nocturnal pollutions* are easy to appreciate and even to cure: I shall not speak, then, of these different seminal evacuations, unless they are sufficiently grave to compromise the health, or have some relation to those which ordinarily escape observation.

I shall preserve the expressions of *diurnal* or *nocturnal pollutions*, although seminal losses may assuredly take place in the night, without erection and without pleasure; although lascivious dreams may be followed by ejaculation after sunrise, &c.; neologism is only excusable when it has for its object the prevention of errors, and I do not think that we can be deceived as to the value of these expressions, which are at the present day received. Only, in order to avoid circumlocution, I shall call every abundant seminal evacuation, in whatever manner it takes place, *spermorrhœa*.

Diurnal pollutions are not always, as is too generally believed, the consequence of venereal excesses or of vicious habits. Many other causes may provoke them; and their influence may be isolated, successive, or simultaneous.

Among these causes, there are some that have been already noticed or glanced at; but many are still entirely unknown: it is precisely these which are the most dangerous, because their influence is more difficult to appreciate.

In all things, the study of causes is the most important and the most difficult; this is true, especially in medicine, and particularly so of the disease which is the subject of this work; because it is principally the cause of the pollutions which is to furnish the therapeutical indications.

True, it is necessary to keep in view the particular state of the genital organs, of the constitution of the patients, &c.; but these considerations are less important in the treatment, and it is especially in a practical point of view that I wish to consider these diseases. It is for want of having carefully distinguished these causes, that propositions have been laid down upon diurnal pollutions as often false as true; and that methods of treatment have been boasted of whose general application is sometimes useful, but very often injurious.

It is, also, without doubt, of the greatest importance to study attentively the symptoms of pollutions, since they are little known, very variable, and may resemble a multitude of affections; but their character is independent of the first cause of the disease; they furnish few indications for the treatment.

On the other hand, the history of seminal losses is so little advanced, that I feel the necessity of proceeding as if investigating

¹ De l'Onanisme et des autres abus vénériens. Paris, 1836.

an entirely new subject: that is to say, to commence by an exposition of many particular facts, before arriving at general conclusions.

But these facts are numerous; it becomes then highly important to have some order in their distribution: I shall take the causes for the point of departure of this "classification," since it is these which play the most important part.

In order to proceed from the evident to the doubtful, from the simple to the compound, I shall examine, first, those causes whose action is the most direct and incontestable. In studying the influence of each cause, I shall report, first, the cases in which the action has been energetic, isolated, and as much as possible verified by the opening of the body; I shall terminate with those in which several causes have acted successively or simultaneously.

After having considered all these observations under this point of view, I shall make a general summary of them, in which I shall return to the consideration of the symptoms and treatment.

In fine, I shall again seek the *analogous* phenomena which we may be able to observe in the female.

I propose then to consider the affections of the genital organs in all their bearings: but I shall pass rapidly over all that is already known; I shall dwell, on the contrary, upon the most accredited errors—upon all that may appear strange or obscure.

I shall especially make use of the notes that I am in the habit of asking from well-informed patients, and I shall preserve, as much as possible, their own expressions.

But if I reported all the cases that I possess, tedious repetitions would be the result: I shall select only those the most proper for making known the characteristic features and most important varieties of this disease.

CHAPTER II.

INFLAMMATION OF THE SPERMATIC ORGANS.

Pathological Anatomy.—Of all the causes of pollutions, the most frequent, the most direct, and the most energetic, is inflammation of the organs destined to the secretion and excretion of the semen; it is also that of which it is the most easy to conceive the influence and to find traces after death: it is then with that I shall commence.

Pathological anatomy has left us but very few materials upon this important and delicate subject: this poverty is owing to various causes.

Inflammations of the spermatic organs do not, at their commencement, threaten life: when patients succumb during this first

period, it is in consequence of some more grave affection; this having absorbed all the attention of the physician, they neglect, after death, to examine the spermatic organs.

When the consecutive influence of these inflammations brings on diurnal pollutions capable of causing death, the epoch of their appearance is very remote; the symptoms have been insidious; their true cause has not been even suspected. Whatever care then they may take at the opening of the body, it happens almost always that they examine all except the genital organs: they publish afterwards incomplete facts, in which they place so much the more confidence, as the dissection of the other organs has been made with more care.

In fine, there is another cause of negligence, which is owing to the situation itself of the prostate, of the vesiculæ seminales, &c.

In order to examine these parts with the minute care that this study requires, it is necessary to divide the crural arch near its middle part, to cut away the muscles from the internal part of the thighs, to saw the two pubes near the middle of their horizontal branch, then the two ischia, and to take away afterwards the testicles, the vasa deferentia, the rectum, and the perineum.

It is then, only, that we can expose clearly the parts situate at the bottom of the pelvis; examine their relations with care; ascertain their colour, their consistency, and their dimensions: things which need to be studied with great attention: for symptoms the most grave may have been the result of lesions almost imperceptible.

Thus, for example, the orifices of the excretory conduits may be frayed in consequence of some slight ulceration; they may become deformed, enlarged in one way, of which I shall mention some examples; and we can readily form an idea of the consequences which would result from the destruction, even partial, of these little sphincters. The colour, the consistency, the exact dimensions of the ejaculatory ducts, may also furnish valuable information.

The examination of all these objects requires much time, patience, and address; in order to understand well every thing connected with them, we must examine them in all their aspects, and that is impossible without previously separating from the pelvis the portion to which all these parts are attached. Thus the incision that I have pointed out, is of indispensable necessity, and yet recourse is had to it only for the examination of some extraordinary diseases of the bladder or prostate.

I ought to add here, that, in order to examine these parts profitably when we suppose them to be diseased, it is necessary to have seen them very often in the healthy state; this is, however, what even those neglect who are the most ardently engaged in the study of pathological anatomy; a fact which explains the poverty of the science, in this respect, and the necessity to which I shall find myself reduced of citing observations, otherwise destitute of all interest.

No. 1.

Blennorrhagia—diurnal pollutions—symptoms of hypochondriasis, of chronic affections of the brain or its meninges—congestions of the head—death. Right kidney in a state of suppuration—prostate almost destroyed—ejaculatory ducts isolated, frayed—vesiculae seminales diseased. Nothing remarkable in the other organs.

In the month of January 1824, I was called to M. de S. for symptoms of *cerebral congestion*, to which he had been frequently exposed for a long time. The following is what I learned from the numerous opinions of physicians that were sent me, and the detailed information that was added to them.

Born at Payerne (Suisse), issue of healthy parents, one of whom died suddenly with symptoms of *cerebral affection*. M. de S. of a robust constitution and an ardent imagination, received a careful education, and applied himself early to the solution of the most delicate questions of philosophy and metaphysics; at a later period, he became ardently occupied with ethics and policy.

After having passed some years at Paris, in the midst of his favourite pursuits, M. de S. was obliged to put himself at the head of a manufactory, and to become occupied with details that offended his pride. He became gradually pettish and capricious; passing, without any known cause, from trifling gaiety to profound melancholy; easily affected by the slightest difficulties, without rejoicing in prosperous events; giving himself up with pleasure to ill-timed censure: in fine, he appeared disgusted and wearied with correspondence and calculations.

At this epoch he married. Dr. Butini, of Geneva, his physician and friend, wrote as follows upon this subject in a consultation:

“This marriage, with a woman of his choice, appeared to form a happier epoch in his life: but, very soon, the genus of the disease, which so many causes had assisted in producing, developed themselves rapidly. It was perceived that M. de S. wrote with slowness and difficulty; his style bore the impress of the decline of his faculties: he stammered and expressed imperfectly his ideas; he suffered from vertigo, at times sufficiently violent to make him fall; without, however, fainting or convulsions ever being superadded.”

One day, as he was writing a very simple letter, he was seized by one of these *étourdissemens*, and could not finish it. This accident strongly alarmed the patient, and left a deep impression upon his family. It was attributed by the physician to a cerebral congestion which had produced a *weakness of the right side of the body*. *Twenty leeches* were applied to the anus, and the danger appeared to be removed.

However, analogous phenomena having been repeated at Geneva and at Montpellier, they consulted, anew, Dr. Butini, the professors, Baumes, Fages, and other distinguished practitioners: some, struck with the misanthropic irascibility of the patient, with his passion for solitude, &c., regarded the affection as purely hypochondriac or nervous; others, dwelling upon the derangement of the digestive

organs, thought of a chronic affection of the liver : but the greatest number believed it to be an organic disease of the brain or of its membranes ; a chronic encephalitis or meningitis, owing to an hereditary predisposition. This last was the opinion of Dr. Bailly (of Blois).

In these different consultations they were agreed upon the necessity of withdrawing the patient from all serious occupation ; upon the utility of traveling, diversion, and regimen ; upon the importance of keeping the bowels open by enemata and purgatives : the greater part advised *frequent application of leeches to the anus*, with milk diet, &c. : some proposed *assafœtida*, baths and pills of camphor. These means produced no evident amendment : the leeches weakened him ; milk diet deranged the stomach ; constipation became obstinate. Cold baths by immersion, cold affusions upon the head, calmed the insupportable spasms that the patient experienced in the legs, thighs and face : the waters of Aix in Savoy and the *douches Ecossaises* appeared also to produce some amelioration.

However, the patient became gradually more irascible, and at the same time more insensible : his moments of passion more frequent and violent, and he showed more indifference for things and persons whom he had most loved. The weakness of the limbs increased, to the point of producing frequent falls upon the most level ground. His nights became agitated ; sleep lighter, often interrupted by nervous tremblings or acute pains, accompanied with cramps and with throwing of the head backwards.

The cerebral congestions increased ; fear of an imminent apoplexy made him recur to new applications of leeches to the anus, to bleedings from the foot, to frictions with antimonial ointment, to blisters, to sinapised pediluvia, and to the application of ice upon the head.

Notwithstanding the employment of these energetic and multiplied means, there came on a new and violent congestion ; it was then that I was called. Here is what I remarked :

The patient was restless, agitated, incapable of remaining two minutes in the same place ; his countenance was red, his eyes prominent, injected, fixed and wild ; his physiognomy bore the impress of profound fright ; his gait was unsteady ; his limbs bent under the weight of the body ; his skin was *cold*, his pulse *small* and *slow*.

These last circumstances struck me less than those upon which my attention had been directed by all that I had just learned, and I also advised leeches to the anus. Immediately M. de S. became violently angry, and assured me that leeches had *always weakened without ever helping him*. I was too much preoccupied with the danger of an apoplexy, to be arrested by this profound conviction, manifested with so much energy, and I had six leeches applied to the neck.

The following day, I found the patient very pale, and so much weakened that he could not go out, which threw him into a state

of despair, for he could not remain in any one place. There came on an œdematous swelling of the right parotid and of the cheek, which was replaced on the following day by a similar state of the foot and left leg.

Repose had become indispensable; the patient was deeply affected by it, and told me *with tears in his eyes*, that he was going to lose his appetite, and would no more be able to go to stool. I learned then, that, notwithstanding repeated falls, he was tormented with a desire to walk and to change his position; that his abdomen was habitually distended and meteorised; that he took many enemata and purgatives to combat an obstinate constipation; in fine, that his *promenades* and his *stools* had become the only objects of his thoughts and conversation.

Having observed analogous phenomena in almost all the individuals affected with diurnal pollution, I made new inquiries with regard to that attack, in which they thought that the *right* side had been affected, and I assured myself very soon that it was the ideas that had failed, and not the movements of the hand that held the pen: the two halves of the body had in reality preserved an equal energy.

Struck with the remark of Dr. Butini, concerning the progress of the disease after marriage, I addressed myself to Madame de S., and I learned that in fact the character of her husband had become peevish, irascible, and meddlesome; which had made his relations suppose that he was unhappy in his family. I began then to believe that we had been deceived as to the true cause of all the symptoms observed during seven or eight years, and I recommended them to preserve the urine of the patient, in order to show it to me the next day.

Its aspect alone proved to me that I had divined justly: it was troubled, thick, of a fetid and nauseous odour, similar to water in which anatomical preparations have remained a long time in maceration. In decanting it slowly, I saw flow out a fleecy cloud like a very thick decoction of barley; a glairy, ropy and greenish matter remained strongly adherent to the bottom of the vessel; in fine, some thick globules, yellowish-white and not adherent, were mingled with this sediment like drops of pus. I remained convinced from that time, that there existed, not only a seminal loss, but also a chronic inflammation of the prostate, and a suppuration of the kidneys.

I imparted my opinion to Madame de S., which surprised her much: I obtained from her the following particulars: she had always thought that her husband was naturally *very cold*; as well as she could judge, he had never committed any excess with her, and nothing inclined her to suspect his conjugal fidelity; coition had always been so rapid, and she had taken so little part in it, that she could not conceive how she could have become a mother; gradually all intercourse had become of very rare occurrence; it had even entirely ceased for the last three years. These hints con-

firmed me more and more in my opinion; but they were still incomplete.

Notwithstanding the state of the intellectual functions of M. de S., I was able, at a favourable moment, to obtain from him some information that had never been demanded of him. Having lost his way in a botanical excursion, in the environs of Geneva, he found himself alone, with a shepherdess, who had left her flock to show him his way. He was 16 years of age, and was just leaving college. Some days after, there came on a blennorrhagic discharge; he concealed it carefully, and succeeded in curing it by the simple use of cooling drinks. The following year the discharge re-appeared and was arrested by astringents. Two years after, having drunk a great quantity of beer in the heat of summer, he saw it make its appearance anew: in fine it returned again during a long journey that he made on horseback. Since then, M. de S. had felt but little inclination for women, and deprived himself of their society without difficulty.

Fully convinced, after the relation of all these circumstances, I explained to M. de S. the nature of his disease. He would not believe it; but he promised to watch himself. The next day, he took me aside and told me that in fact the last drops of urine were viscous, and that in going to stool, he had collected the hollow of his hand full of similar matter. (*Iced milk, &c.*)

Eight days after, there came on a new cerebral congestion, in consequence of which the respiration became stertorous, the skin of an icy coldness, the pulse imperceptible; the patient fell into a kind of syncope, which was followed by death the 1st of March, 1824.

They had regarded the disease of M. de S. as hereditary: he left a son: I took advantage of this circumstance to obtain an examination of the body. A member of the family even desired to be present: it took place twenty-six hours after death.

Subject excessively emaciated, abdomen green, emitting a strong odour.

Cranium. Between the dura mater and arachnoid some *bubbles of air* mingled with a viscous serosity; vessels of the pia mater a little injected; arachnoid a little opaque towards the falx, but without thickening or granulations: in the ventricles two or three spoonfuls of limpid serosity; no alteration of the arachnoid that lines them: cerebrum a little injected, soft in all its parts, but without any perceptible disease in one point more than in another: cerebellum likewise very soft, of ordinary volume, neither more nor less injected than the cerebrum, without any particular alteration. Three or four spoonfuls of serosity at the base of the cranium or at the origin of the vertebral canal.

Thorax. Pulmonary pleura every where adherent to the costal pleura by a dense and compact cellular tissue; lungs crepitant and pale, except behind; heart of ordinary volume, and firm.

Abdomen, meteorised, green, emitting a strong odour; liver of a

natural colour, and very firm; a spoonful of bile in the gall-bladder; spleen small, of a violet colour, and dense; stomach distended with gas; mucous membrane thin, supple, of a slate gray colour; small and large intestines also distended with gases, but thin and pale; fecal matters in small quantity, brown, liquid, and excessively fetid.

Left kidney of ordinary volume, of a fine red colour, and very firm.

Right kidney a third larger, adherent to the surrounding parts by a dense, fibrous, and very strong cellular tissue, containing in its parenchyma about forty small abscesses, varying from the size of a pea to that of a walnut; some recent and without envelopes, others ancient, encysted, filled with a thick, creamy pus; tissue of the kidney reduced in four fifths of its extent, into a dense, coriaceous membrane filled with thick septa, fibrous, and somewhat of a violet colour; internal membrane of the pelvis red, villous; ureter thin, distended, brownish, very much injected on its internal surface.

Bladder ascending almost to the umbilicus, containing two pints of quite transparent urine.

In order to examine the genital organs with greater care, I took them away with the rectum, after having sawed the pubis and the ischia.

Walls of the bladder thin; muscular fibres weak and separated; mucous membrane of a rose colour, a little injected, but thin and scarcely altered.

Prostate projecting three or four lines behind the neck of the bladder, to the extent of an inch and a half in surface. In the entering angle that the peritoneum forms in extending itself from the bladder upon the rectum, effusion of an albuminous matter, of a yellowish white, half a line in thickness, and about two inches in extent, uniting the vesiculæ seminales to the anterior wall of the rectum.

Left vesicula seminalis small, brown, but in its natural situation; right vesicula seminalis separated from the corresponding vas deferens, folded upon the posterior border of the prostate, and, as it were, *wasted*; surrounded by a dense fibrous tissue, and difficult to dissect.

Prostate of twice its ordinary volume, projecting into the rectum; hard upon the lateral parts of the neck of the bladder, soft in its middle part.

A stroke of the scalpel having divided its fibrous envelope, there flows from it a purulent matter, thick, opaque, stringy, and elastic, similar to pus in colour, and to the nasal mucus in consistency. A cavity occupying all the anterior and middle part of the prostate is about fifteen lines larger in all directions when the purulent mucus that it contains is drawn out, the gelatinous mass is seen dividing itself into an infinity of filaments which are inserted into as many little holes. The canal of the urethra being split, these filaments are seen coming out from the openings of the mucous

follicles of the prostate; when the cavity is emptied, we observe that the inferior two thirds of the prostatic portion of the urethral mucous membrane have been, as it were, dissected, and cover the cavity of the prostate as the cribriform plate of the ethmoid covers the nasal fossæ in the cranium.

The opening of the ejaculatory ducts, instead of being circular and mammary, forms an elongated, ragged slit, especially on the side towards the bladder; two stilets introduced by the vasa deferentia, although quite large, pass out easily by these openings; the ejaculatory ducts, small and thin, are, as it were, dissected, and form part of the superior wall of the cavity hollowed in the prostate; the posterior border of the prostate is not yet destroyed, but it is pale, flaccid, easy to tear, as well as the parts in the neighbourhood of the principal disease; an unctuous and puriform matter may be pressed out as through long tubes.

Nothing particular in the urethral canal. Testicles small, flaccid and pale.

I have left this case such as I have recorded it under the influence of first impressions, because this form is eminently suited to bring to light some very grave and long cherished errors in diagnosis, which are much more common than we might believe them to be.

Now that we have seen how the errors were gradually dissipated, let us restore the chronological order of the facts.

An urethral discharge, badly treated in the beginning, reappeared under the influence of quite trifling causes, but of which it is easy to appreciate the action. The follicles of the prostate, often inflamed, become destroyed: the ejaculatory ducts are denuded; their orifices ulcerate and become uneven; the inflammation extends to the vesiculæ seminales and even to the corresponding peritoneum.

From that period a new series of symptoms manifests itself, which rapidly becomes more grave in consequence of a marriage, which provokes an unusual fatigue of the diseased organs: the ejaculation is hurried, because the excretory canals are irritated; the erections become incomplete, impossible, because the semen, eventually, is expelled in proportion as it is secreted; this loss is considerable, because the testicles participate in the irritation of the excretory canals.

During this time, the inflammation extends itself step by step, in the direction of the urinary organs, gains the bladder, and the ureters, and terminates by bringing on the destruction of the right kidney.

Hence, the accidents observed until death; hence, the remarkable character of the urine, a character whose importance is scarcely suspected at the present day, because empirics have rendered the examination of the urine almost ridiculous.

Thus, the inflammation, departing from that portion of the urethra where the excretory canals of the semen and the urine

terminate, extended gradually in these two directions, carrying trouble into these two functions, and disorder into the rest of the economy: by final analysis, all goes back then to the blennorrhagia contracted twenty years before death.

No. 2.

Blennorrhagia—pollutions, hypochondriasis, frequent cerebral congestions—death. Suppuration of the vesiculæ seminales—ossification of the vasa deferentia—cystitis—phlebitis—ancient adhesions of the arachnoid, as well as of the pleura—suppuration of the muscles of the neck and shoulders.

The 25th of September 1825, Professor Broussonet had the kindness to inform me that he had placed at my disposition the body of one of his patients, who, according to what had been related to him, must have died of some cerebral congestion.

Sensible of the kindness of my colleague, I hastened to repair to the amphitheatre of dissection, where were assembled the students of the two clinics. The scull-cap had been already removed, and they were preparing to divide the dura-mater; but, before proceeding further, I demanded some information from those who had followed the disease, with the hope of divining the nature and seat of the changes that we were going to meet with.

This is what I learned:

Francis Maurice, sixty-three years of age, formerly a soldier, and lately forest keeper, had for a long time very feeble legs; he staggered in walking, as if attacked with dizziness; he would have fallen often, if he had not had an attendant. From time to time he experienced congestions of the head; the face became red; he lost his consciousness, and felt very variable spasmodic symptoms; then the face became pale, and he fainted. These attacks had been combated by venesections, derivatives, antispasmodics, leeches, &c.

At length, the 22d of December, there came on a more violent congestion towards the head, with violet colouring of the face; and the following day he died in a state of general paralysis.

These symptoms had made them suspect a chronic affection of the brain or of its membranes, causing congestions, of which the last had terminated by sanguineous effusion.

This opinion appeared plausible to me; but the desire of ascertaining the precise seat of the disease, made me multiply questions.

They led to a result very different from what I had anticipated. The students could not agree upon the side of the body which had appeared the most affected; but it was certain that no distortion had taken place in the features of the countenance, which made me believe that the symptoms had always been general.

As to the cause of the disease, it appeared that it was to be attributed to some chagrin. The patient spoke but little; he had constantly a sombre and taciturn air, and complained of a multitude of different evils, of which the greater part had appeared imaginary or exaggerated. He complained, sometimes, of pains

near the occiput, in the neck and back; sometimes of colics, of tension in the hypogastrium, of borborygmus, &c. In spite of his weakness, he had an irresistible desire for change of place; he could not remain in his bed; went often to the privy: in fine, he had an unquiet, troubled air; he vexed the attendants and affronted the students: he generally passed among them as a hypochondriac.

The union of all these circumstances made me doubt the existence of a cerebral disorganization. I recollected the history of M. de S., and I gave another direction to my questions. I learned very soon that Maurice had experienced several retentions of urine: they reminded me that I had sounded him some days before his death. From that time I declared to the students that I did not believe at all in any lesion of the brain, and that I attributed all the symptoms in question to involuntary and unnoticed seminal losses. It is easy to imagine the increased interest that was excited at the opening of the body. These are the results:

Cranium.—Brain, cerebellum, every where a little soft, but not more in one place than in another; cerebral substance a little injected, especially behind, but in a uniform manner. Near the inferior occipital fossæ, several ancient adhesions, *cellular*, five or six lines in extent, and uniting in an intimate manner the corresponding surfaces of the arachnoid; cerebellum likewise adherent to the pia-mater in the same place, and not to be detached without leaving in situ a portion of the circumvolutions. In the remaining portion of the cranium, not the least *local* alteration, that could be regarded as the result of a *recent* disease.

Thorax.—Lungs healthy; some ancient adhesions of the pleura, of both sides; heart flaccid, colour of wine lees, and very easy to tear; principal veins without consistency, and of a violet brown; same state of the iliac and crural vessels.

Abdomen.—Mucous membrane of the stomach lightly injected; same state of the small intestine; nothing else remarkable. Kidneys in a healthy state, as well as the ureters.

Bladder containing a great quantity of muddy urine, *united to the rectum by cellular adhesions*; mucous membrane of a *deep red, strongly injected*, covered with small ecchymoses by the extravasation into its substance of some drops of blood. Prostate of natural dimension and consistence.

Vesiculæ seminales dilated with thick and dense walls, with a surface regular and almost without wrinkles or inequalities; *adhesion* of these vesiculæ to the neighbouring parts, by a dense and much injected cellular tissue: in each of these a spoonful of *thick and yellowish pus*, enclosed in three or four cavities communicating with each other and with the excretory canals. Surface of the purulent centres, unequal, rough, lined with a species of false membrane, formed by a layer of thicker pus.

Vasa deferentia tortuous, completely *ossified* to the extent of about three inches, but not obliterated; containing, also, a slightly viscous liquid.

Mucous membrane of the urethra much injected, particularly from the bulb of the bladder; mucous follicles strongly developed.

Neck of the bladder tumefied, of a reddish brown, without consistency, furrowed with several recent rents.

Some days after, some students who were studying myology upon the subject, informed me that they had found the subscapularis, infra-spinatus, and supra-spinatus muscles of both sides, as well as several muscles of the neck, in a state of *suppuration*.

The scrupulous examination of all these organs had completely justified my anticipations; but I regretted not having any positive detail upon the cause of the disease, upon its symptoms, &c. M. Bernardi, one of the most zealous of my students, commenced a research, and some days after, he discovered successively three persons who had been intimately acquainted with Maurice for fifteen years: he obtained very detailed information from them: the most important and best substantiated is as follows:

Maurice, whilst serving, had contracted, at the age of twenty-three years, a violent blennorrhagia, accompanied with inflammation of the testicles and of the spongy tissue of the urethra, (*chaude-pisse cordée tombée dans les bourses.*)

After the disappearance of the first troubles, he had abandoned the discharge to itself, and since, he had often been led to reproach himself bitterly for his negligence; he appeared even to give way to it in a hurtful degree. His character, formerly very gay, had gradually changed; he fell frequently into fits of profound melancholy, during which he imagined that every body bore a grudge against him: when these moments had passed, he abandoned himself to pleasure: he drank much to stupify himself; but when he was no longer excited by the presence of his comrades, he fell back again into his melancholy mood, and complained often of pains in the head, *seated about the occiput*.

He had, at first, nocturnal pollutions; afterwards he perceived that on going to stool, he passed sometimes some semen, particularly when he was constipated. Gradually his digestion became deranged; constipation became habitual, and the seminal losses increased.

He ceased from his orgies, and finally could not drink wine. His health, however, became impaired; he took cold easily, and was exposed to a *stitch in the side*, to frequent pains in the limbs and kidneys: he was incessantly annoyed with flatulence, colic, diarrhœa, or obstinate constipation. His limbs grew weak; his whole body was habitually agitated with tremblings; still he could not remain in bed; he was tormented night and day by a continual desire for a change of place; and, as he was very feeble, he met with frequent falls. Towards the last, he had some difficulty in supporting his head, and complained of a constant pain *in the shoulders and neck*, accompanied with stiffness in the vertebral column. The emission of urine, at first irregular and laborious, at length became at times impossible without the aid of the catheter.

In fine, he was subject to frequent sanguineous congestions towards the head, during which the face became very red and even of a violet colour: he lost his consciousness, was strongly agitated, and appeared menaced with a new attack of apoplexy. The *élève de garde*, called under these circumstances, practised invariably venesection, or applied leeches; and, as the attack lasted but a short time, the patient attributed its disappearance to the loss of blood: immediately after, even when they had not taken blood, the patient remained extremely pale, and as it were in a swoon: it was in one of these attacks that he died.

The same causes produced the same effects as in the preceding case; the same symptoms conducted to the same errors in diagnosis; also, it was as difficult to arrive at the truth: the same changes were found after death. Cases of this nature are not then so rare as we might imagine.

Let us suppose that, in these two cases, we had proceeded to the examination of the organs with the prepossession that had existed during the observation of the symptoms. It is clear that we should have found nothing in the cavity of the cranium which could account for the cerebral phenomena observed up to the last moment; for the general and uniform softness of the nervous substance is observed at the termination of all chronic affections, particularly when the cadaveric decomposition has already made some progress. I have had occasion to observe this before commencing the study of the *ramollissemens*. It is evident, also, that we should have found nothing more satisfactory in the other viscera: who knows, then, to how many errors these observations might have conducted?

Among the facts cited by the partisans of nervous apoplexies, of essential spasmodic affections, &c., I am convinced that there are a great number which belong to diurnal pollutions; but the genital organs not having been examined, it is impossible to prove that these conjectures are well founded. I hope that, very soon, all practitioners will be able to avoid similar errors. But let us return to Maurice.

At twenty-three years of age, he had a *chaude-pisse cordée tombée dans les bourses*; that is to say, an inflammation extended to the spongy tissue of the urethra, and to the testicles. As soon as the most severe symptoms were dissipated, Maurice resumed his habits, and gave himself up very soon to excesses of all kinds. Gradually, his health became deranged under the influence of nocturnal, then diurnal pollutions: he became a hypochondriac; and in spite of his tardy and forced prudence, he died at seventy-three years of age, in the same state as M. de S. The vesiculæ seminales were in a state of suppuration, &c.

This neglected blennorrhagia, often exasperated, was, then, the first cause of the disease which produced death fifty years afterwards. It is perhaps very extraordinary, but it is rigorously true.

Why did this patient continue so much longer time than the

first? Because the disorganizations were much less grave: and even the state of the pus found in the prostate appears to announce that the inflammation had not assumed an acute character until the last period of the disease.

Can there exist, at seventy-three years of age, diurnal pollutions capable of compromising life? Without the least doubt, since the vasa deferentia still contained a gluey viscous matter, which was nothing else but badly elaborated semen: besides, the patient told his friends, a short time before his death, that in going to stool he had again passed the hollow of his hand full of semen.

I have said that Maurice passed for a hypochondriac, and that they regarded his pains as imaginary, or at least as much exaggerated: however, we have found in many different organs, recent or ancient alterations that it is important to compare with the complaints of the patient.

In proportion as his health decreased, he was more susceptible; became subject to stitches in the side; the lungs were united to the ribs by cellular adhesions; he complained often of pains in the head seated about the occiput, and the cerebellum was found adherent to the membranes in several points, at the same time that these were united among themselves; during the last periods he complained of constant pains in the shoulders and neck; the subscapularis, supra and infra spinatus muscles of both sides, as also several of those of the neck, were in a state of suppuration; the patient was subject to retentions of urine, and the neck of the bladder was tumefied, of a brownish red, as well as the urethral and vesical mucous membrane.

I ought to add that the principal abdominal veins, and even the crural, were softened, of a violet colour, presenting, consequently, traces of phlebitis.

We see, then, that the greater part of the evils of which Maurice complained, were owing to as many real local inflammations.

I know that many of the symptoms experienced by patients attacked with diurnal pollutions, are purely nervous; that often we do not find after death any trace of change in the organs that we thought affected; but I know also, in what manner the greater number of post mortem examinations are conducted.

We forget also too often, that the slow and progressive weakening of the constitution, in consequence of the derangement of the digestive organs, has not only the effect of increasing the nervous susceptibility of the hypochondriac, but that there results from it also a less energetic resistance of the different organs to the action of all causes fitted to derange the health; so that they are much more exposed to all diseases, at the same time that they suffer from them more.

Again, a few words upon two other changes. The vasa deferentia were ossified in several points: this ossification was not the effect of age, as some might think; for I have found it, under

similar circumstances, in very young subjects: it must then be attributed to an ancient inflammation.

In orchitis which follows blennorrhagia, the inflammation extends itself from the mucous mæmbrane of the urethra to the testicles, by the ejaculatory ducts, the vesiculæ seminales, and the vasa deferentia: these are almost cartilaginous, in the normal state; when they are inflamed, they become readily encrusted with phosphate of lime.

The neck of the bladder was furrowed with several recent rents. When the *élèves internes* desired me to sound this patient, they had not been able to penetrate into the bladder; I learned, that they had always made use of the smallest catheters: on the contrary, I employed the largest I could find, and passed it without difficulty into the bladder: this goes to support what I have said of catheterism in cases where there are no strictures to be overcome.

No. 3.

Blennorrhagia—retention of urine, &c.—apoplexy—death. Extravasation of blood in the left ventricle—hypertrophy of the heart—gastro-enteritis—abscesses and tubercles in the kidneys, in the prostate—stricture, &c.

Gojon contracted at 40 years of age, an intense urethritis, complicated with orchitis (*chaude-pisse tombée dans les bourses*). Treated by irritating medicines, which produced diarrhœa and violent colics, it diminished without disappearing entirely: a slight urethral discharge persisted until he was fifty years of age, with pain in the prostatic region and fossa navicularis. There was connected with it also an obstinate constipation.

From the fiftieth to the sixtieth year, difficulty in the emission of urine, painful sensation in the urinary apparatus, curvature of the body forward, laborious digestion, considerable emaciation and remarkable decline of the intellectual functions; later, frequent retention of urine, treated with success by baths and emollient drinks; intolerable pains in the kidneys and bladder; hypochondriasis, aversion for frequented places, melancholy, great debility.

The 1st of February, 1827, new retention of urine, (*leeches to the perineum, general baths, emollient drinks*), no relief; acute inflammation of the perineum and of the cellular tissue of the scrotum: (*fomentations*.)

The 5th, rupture of the skin of the perineum in three places; issue of a great quantity of urine mingled with pus.

The 10th of February, entrance of the patient into the hospital. Sixty-five years of age; skin hot; pulse full, strong; cheeks red; eyes suffused, sub-orbitary pain; ideas quite clear; tongue red and dry; great thirst; desire for cold drinks; abdomen sensible to pressure, particularly in the hypogastric region; fruitless attempts to introduce the catheter: (*fomentations upon the abdomen*.)

The 11th, attack of apoplexy. The 12th, death.

Post-mortem examination.—*Head.* Considerable extravasation of red blood into the left lateral ventricle of the brain.

Thorax.—Lungs crepitant. *Hypertrophy of the left ventricle of the heart.*

Abdomen.—Mucous membrane of the stomach red in its whole extent, covered with small ulcerations here and there; injection of the intestines more and more evident as we approach the anus; in the rectum some ulcerations.

Genito-urinary organs.—In each kidney ten to twelve abscesses; in the left, tubercles in a dormant state, of the size of a bean; ureters dilated, red, and injected internally.

Bladder.—Of a firm texture, with fleshy columns, one inch in thickness. Mucous membrane bordering upon the violet, thickened and softened, ulcerated in several points. Prostate three times more voluminous than usual, more developed under the neck of the bladder than on the side of the rectum; furnishing upon pressure a purulent matter, very abundant, containing about thirty small abscesses and as many miliary tubercles in a dormant state. This prostate resembles the tissue of the lungs, loaded with tubercles, of which some are softened, others in a state of suppuration, and others still unchanged. Vesiculæ seminales thickened, as also the vasa deferentia.

Circular stricture of the canal, half an inch in front of the prostate, formed by a reddish tissue of a horny consistence, and scarcely permitting the introduction of a catheter, No. 2. Enormous dilatation of the urethra, between the obstacle and the neck of the bladder; mucous membrane of this portion of the canal thickened, fungous, and softened, presenting at its posterior part a crevice into which open three fistulæ.

Cellular tissue of the scrotum and the perineum filled with pus. Testicles healthy.¹

This patient died the day following his entrance into the hospital. During this short space of time, his state did not permit us to think of seminal losses, under ordinary circumstances very difficult to prove in cases of this nature. However, the stricture had its seat a little in advance of the orifice of the ejaculatory ducts; the prostatic mucous membrane was disorganised by inflammation; nothing is more common than diurnal pollutions under these circumstances. On the other hand the prostate was profoundly disorganised, the vesicular seminales were thickened, as well as the vasa deferentia. It is then presumable that the hypochondriasis, the decline of the mental faculties, the great debility of the economy, &c. were owing, as in the preceding cases, to an habitual loss of semen.

Death was caused by an extravasation of a considerable quantity of blood into the left ventricle. Was this hemorrhage the result of one of those cerebral congestions of which there has been question in the preceding cases? This is what analogy appears to indicate.

¹ I am indebted for the notes of this case to M. Waton, one of the most studious of my pupils.

Moreover, there existed a hypertrophy of the left ventricle of the heart, and all know the influence that the undue development of this cavity exercises over the brain. If this hypertrophy was not the only cause of the hemorrhage, it must have had the greatest share in it. In questions so new and so obscure as this with which we are occupied, that only must be admitted which is incontrovertible, and we must resist as much as possible the fascination of prepossession; thus it is for other reasons that I have here reported this case.

It confirms, in fact, in a very clear manner, what I have said of the facility with which inflammation of the mucous membrane of the urethra extends itself to all those in the neighbourhood.

The first disease was *chaude-pisse tombée dans les bourses*. Thus, at the commencement, the inflammation extended itself from the urethra to the organs destined to the secretion of semen, by the way of their excretory canals; and this mode of extending itself cannot here be questioned, since, twenty-five years afterwards, the vesiculæ seminales were still thickened, as well as the vasa deferentia. The extension of the inflammation in the direction of the urinary passages was still more evident, since, not only the prostatic mucous membrane was thickened, fungous, and softened, but, in addition, that of the bladder was thickened and softened also, violaceous, and even ulcerated in several points; the ureters were dilated, red, and injected internally; in fine, each kidney contained from ten to twelve abscesses; there existed besides tubercles in the left kidney.

The prostate is the principal seat of blennorrhagic discharges; it is situate at the junction of the spermatic and urinary organs; it could not then be otherwise than implicated by disorders seated in tissues still more remote from the point of departure; thus was it more diseased than the kidneys. It had three times its ordinary volume; independently of the purulent matter furnished by its mucous follicles, it contained about thirty small abscesses and as many tubercles in a dormant state.

I will remark, in passing, that the circumstances under which the tubercles of the prostate and left kidney were developed, and the existence of these tubercles by the side of recent abscesses can leave no doubt as to the cause of their formation.

Before terminating these reflections, I ought also to remark, that there existed unequivocal traces of acute gastro-enteritis, and even of ulcerations in the rectum. It is to this complication that we must attribute the redness and dryness of the tongue, the ardent thirst, and the tenderness of the abdomen to pressure, &c., symptoms very characteristic of inflammation of the digestive organs, which must not be confounded with the derangement of their functions, with the gastralgia which frequently accompanies diurnal pollutions; neither must the alarming hemorrhage which caused the death be confounded with the cerebral congestions considered in the preceding cases.

Unfortunately these distinctions between these different cases are the more difficult to be established, as some disorganisation of tissue often succeeds to these functional derangements, purely sympathetic; so that it is often impossible to ascertain the moment when the affection becomes really idiopathic. It is this difficulty especially, which, until the present time, has thrown so thick a veil over diurnal pollutions; it is this which renders the accumulation of particular facts and their minute discussion so necessary.

No. 4.

Several blennorrhagias—stricture—retention of urine, delirium, &c.—death. Injection of the kidneys—cystitis, pus in the prostate, in the left vesicula seminalis, in the left testicle—tunica vaginalis of the same side obliterated. (Stoll. pars prima rationis medendi, sext. xv.)

A musician, aged thirty-two, entered the hospital the 8th of October. He was delirious, the pulse was very frequent, small, and disappeared under the slightest pressure of the finger. Those who had brought him said, that for a month he had remained in bed at home, and that a surgeon was treating him for a disease of the testicles. The prepuce was callous and adhered to the glans in its whole circumference. No ulceration was perceived any where. The left testicle appeared a little larger than the right. The orifice of the urethra was so narrow that no bougie could enter it.

In order to rouse up the vital powers, Stoll prescribed vesicatories, sinapisms, infusion of the root of the serpentaria virginiana, of contrayerva and camphor in large doses. The pulse regained its strength; at the end of two days his senses returned for a short time, and the patient said that, for eight years, succeeding several gonorrhœas, his urine was rendered with great difficulty and with a very small jet. He wished to say more but the delirium returned, which prevented him. At length they passed a very small catheter upon him, by means of which very red and bloody urine was evacuated. The patient died Oct. 12th.

The urethra having been opened, there was found near the frenum a considerable stricture, which was the only obstruction that had rendered the introduction of the catheter difficult during the life of the patient; for there existed no other alteration in the rest of the canal.

The verumontanum was healthy, only the orifices of the ejaculatory ducts were more dilated than usual, and the left emitted some pus when the prostate was pressed. In compressing slightly this same gland with the finger, pus was poured out from all its excretory ducts; and when opened, some small abscesses were found, of the volume of a lentil or of a pea.

The right vesicula seminalis was in the natural state, and full of spermatic liquor; the left was filled with pus, and its walls were

hard, thickened, and inflamed in several points. The left tunica vaginalis was very adherent to the testicle; this, more voluminous than the right, contained an abscess as large as a walnut, filled with thick and healthy pus. The two cords of the spermatic vessels were in a good state.

The bladder contained a little bloody urine; and there were to be seen, over all its internal surface, large spots of a deep red, which appeared like so many bruises.

The kidneys were more red than usual.

The intestines were inflamed. No alteration of the right lung; but there was found throughout the whole substance of the left, tubercles of the size of a pea or lentil; hard, white, solid, as if formed of soft cartilage. The substance of the lung interposed between these tubercles was very friable, and appeared changed. Besides, this lung was strongly adherent to the pleura, which itself was very thick; its greatest thickness was one inch. In some points it had the aspect of soft cartilage; other portions were white, tenacious, tendinous; formed of different layers applied one upon the other, which could be separated with an instrument or even with the finger. Some pieces, cut transversely and pressed between the fingers, poured out blood in all directions from the numerous small vessels distributed to them.

The lateral ventricles of the brain were found full of a yellowish serosity.

Stoll does not mention seminal losses; but he had no opportunity of observing the disease except during the last four days of the patient's life: besides, we have seen that this accident was difficult to prove, even when unaccompanied by stricture. The profound disorganization of the spermatic organs, permits us, then, to attribute the weakness that confined the patient to his bed during one month, to these enervating evacuations. However, these are only conjectures; and although they appear well founded to me, I abandon them willingly, to pass to the more positive circumstances which have induced me to report this case.

This patient, like the preceding, had blennorrhagias: their influence was likewise extended to the organs destined to the secretion of semen and urine, by the way of their excretory canals. The kidneys contained no abscesses, but they were redder than usual. The mucous membrane of the bladder presented large spots of deep red, similar to bruises.

On the other hand, some pus escaped from the left ejaculatory duct; the corresponding vesicula seminalis was filled with it: the left testicle contained an abscess. In fine, the left tunica vaginalis had itself been inflamed, since its cavity was obliterated by adhesions. The prostate, which had been the point of departure of all these inflammations, furnished pus from all its excretory ducts, and contained a great number of abscesses of the volume of a lentil or pea.

Here, then, is another fact which proves in the most evident manner, that inflammations of the urethra extend themselves, in all directions, through the medium of the mucous membranes. We see, also, in what manner abscesses and tubercles (No. 3) of the prostate are formed, and how they can empty themselves by the orifices of the mucous follicles, without its envelope becoming implicated, (No. 1.)

No. 5.

Delirium—agitation—hypogastric pain—death. Meningitis—peritonitis—cystitis—remarkable suppuration of the mucous follicles of the prostate, of the right vesicula seminalis, and of the corresponding vas deferens.

Being at Paris in November, 1826, I had an opportunity of seeing my former schoolfellow, Dr. Dalmas, at the moment when I had just read an excellent dissertation of his, upon *organic lesions considered as the only cause of all diseases*. The conversation naturally fell upon this subject; and I communicated to him several cases of seminal losses resembling cerebral affections, gastro-enteritis, &c. These facts corresponded too well with his own views not to strike him. He promised, then, no longer to neglect any opportunity of examining the genital organs.

Some days after, Dr. Dalmas, having made at the Charité the post mortem examination of an individual who had died with a cerebral affection, wished to examine the state of the prostate and vesiculae seminales, and he was not a little surprised to see pus poured out of them: he took care to preserve the parts, in order that I might examine them with him, on the following day. He gave me, at the same time, an account of what he had been able to learn with regard to this patient.

Jean Pierre, domestic, aged twenty-four, of a brown complexion, ordinary height, well proportioned, appeared to possess a good constitution. He had had, however, in the summer of 1826, a disease that his physician designated under the name of *inflammation of the belly*. He was subject to some cough. It was under these circumstances that this young man was seized, without any known cause, or of which he would tell, with lassitude, fever, and all the symptoms which precede acute diseases. Some days afterwards, 14th of November, 1826, he was received at the Charité, Salle St. Michel, in the following state:

Agitation; eyes brilliant; physiognomy changeable; alternate pallor and redness of the countenance; passing chills, slight tremblings in all the limbs, in the tongue when he puts it out or when he articulates sounds; headach; sight a little troubled; pulse frequent, but little developed; nausea; colics; sensibility of the whole belly to pressure, particularly in the hypogastric region: when the patient is questioned a long time, we perceive that he at length talks incoherently. (*Barley, oxymel, diet.*)

The following day; the 15th, subsultus tendinum; tongue dry; belly and hypogastrium more sensitive; no diarrhœa. (Barley, oxymel, sinapisms.)

The 16th, slight delirium; pulse diminished; otherwise, same symptoms: same treatment.

The 19th, considerable dilatation of the pupils; delirium more marked and almost constant; disorderly movements, but which are not convulsive; agitation of the arms and legs to free himself from the coverlids; no paralysis of sensation or motion; retention of urine; pulse diminishing. (Ten leeches to the hypogastrium, ten more to the neck, barley water, diet.) Catheterism easy, appearing to cause but little pain; bloody urine.

20th.—Abdomen tense; fever; delirium; pupils constantly dilated; cold extremities; death, without either convulsion or paralysis having been observed.

Post mortem examination, on the morning of the 22d.

Cranium.—Meninges dry; cerebral circumvolutions flattened; anfractuosities slightly marked; six or seven ounces of turbid, milky serosity in the ventricles; septum lucidum softened, flowing like cream, without any trace of injection or pus; brain and cerebellum healthy.

Thorax.—In each lung, miliary tubercles, gray and semi-transparent; no caverns; pleura and bronchia of natural appearance.

Abdomen.—Adhesion of two portions of small intestine to the summit of the bladder, by means of recent unorganized false membrane; vesical mucous membrane injected, of a red black, lined with grayish false membranes; thickening of the muscular coat; urine troubled.

Vas deferens of the right side larger, more dense than the left, with thicker and less transparent walls; increasing in volume towards the corresponding visicula seminalis; containing, in its whole extent, thick pus, well formed, and of a yellowish white. Internal surface of this same vas deferens velvet-like, unequal, as it were alveolar, of a yellowish white, lined with a kind of false membrane, formed of concrete pus, as far as the orifice of the corresponding ejaculatory duct. Vesicula seminalis of the same side more voluminous, more prominent than the left, less wrinkled surface, much thicker walls; its tissue more dense and of a yellowish tinge; containing more than a spoonful of a greenish yellow pus, less thick than that of the vas deferens, exactly like the pus of an acute phlegmon; alveolar anfractuosities of the vesicula effaced, destroyed, so as to form only one vast sac a little irregular: at the bottom, cells destroyed, pus much more concrete, precisely analogous to tuberculous matter.

Left vesicula seminalis healthy, containing a thick, greenish, glutinous, not ropy matter, but unctuous, and quite like meconium.

Prostate voluminous, unequal, wrinkled, presenting at its surface a multitude of small whitish points, isolated as in the furunculus, or grouped as in certain kinds of anthrax, slightly elevated below

the fibro-cellular envelope of the prostate, through which they can be seen, owing to the deep colour of the surrounding parts.

The right lobe of the prostate is more prominent than the left; divided, it resembles at first view a large scrofulous tubercle yet hard, and, as it is called, in a *dormant* state. The parenchyma appears entirely replaced by concrete tuberculous matter. However, on examining with attention this alteration, it is easily seen that it is not a homogeneous matter, but an agglomeration of mucous follicles, dilated and filled with pus. In dissecting them separately, from their orifice in the mucous membrane, to the bottom of their cul de sac, we see evidently that each of them has participated in the inflammation of the ejaculatory duct of the vesicula, of the vas deferens, and that they are filled with similar pus.

The laminated tissue that unites them not having participated in the inflammation, it is easy to isolate them in their whole extent, and to assure ourselves that the white points remarked upon the surface of the prostate, are only the cul de sacs of these mucous follicles, gorged with pus and covered by the fibro-cellular coat. In the left lobe, the number of the inflamed mucous follicles is less, and they are more isolated: which allows us to prove still better the nature of the disorganization. Never could any artificial preparation give a more exact idea of the structure of the prostate.

Whatever desire I might have to support my own views by the observations of others, I shall be able to resist the temptation of torturing them in order to draw from them forced conclusions. It is not demonstrated to me that this patient experienced abundant seminal losses; and, even if it were, I still could not see any relation between these pollutions and the symptoms observed.

The delirium, agitation, dilatation of the pupils, &c. are symptoms of meningitis, which differ much from those which have been remarked in the first two cases: since there existed an inflammation of the arachnoid: I can only see here then a coincidence of the two diseases.

The case of Dr. Dalmas is not less interesting in other respects; it proves, like the preceding, how obscure are the diseases of the genital organs, since nothing led them to suspect the existence of this acute inflammation. It shows also with what facility these inflammations extend to the neighbouring mucous membranes.

That of the bladder was *reddish black*, and lined with false membranes.

It is rare to find so favourable an opportunity for examining the mucous follicles of the prostate at the commencement of an acute inflammation, before the cellular tissue has had time to undergo any change: it is easy after this examination to form an idea of the course taken by the disease in cases where it was more advanced.

The inflammation has likewise extended itself to the vas deferens, by the way of the mucous membrane, since the vesicula seminalis and the ejaculatory duct of the same side were filled with pus.

It is well to remark here, that the pus, which was found confined at the bottom of the cells of the vesicula seminalis, was much more concrete, entirely similar to tuberculous matter. If that which occupied the central part of the cavity had presented the same appearance, it is probable we should not have been willing to recognise this tuberculous matter as a product of inflammation.

The other vesicula seminalis contained a thick greenish matter, quite similar to meconium. These are not the ordinary qualities of semen. This profound modification of its composition must be attributed to an irritation provoked by the same cause which had occasioned the inflammation of the other spermatic organ.

Dr. Dalmas has reported this case in an interesting memoir, from which I shall select two similar cases observed by him.

No. 6.

Diarrhœa—vomiting—delirium—carphologia—dilatation of the pupils—death. Gastro enteritis—meningitis—pus in the prostate, the vesiculæ seminales and the vasa deferentia.—(Dalmas, Journal hebdomadaire, No. 33, Mai 1829, obs. 3.)

Michael Boeps, aged 23, labourer, residing in Rue de Bourgoyne, No. 25, was admitted the 10th of September, at the Charité, into ward St. Jean, service of M. Rullier. He had fallen the preceding day into a state of hebetude and prostration, giving only imperfect replies as to his situation. Those who brought him said that, for three months, he had had a copious diarrhœa, very lately checked; that he vomited every thing he took: his pulse gave at the most sixty beats.

M. Rullier, struck with the stupor, with the appearances of weakness, and the want of reaction, prescribed sinapisms, mild drinks, emollient enemata: sanguineous evacuations did not appear to be indicated, and nothing led them to seek for the cause of this irregular state in the genital organs. Gradually the skin became warmer; the pulse rose; the stupor became converted into a tranquil but real delirium. There came on carphologia, and involuntary subsultus. (Twenty leeches, blister to the neck, infusion of arnica, enema.)

17th. Dilatation of the pupils, coma at times interrupted: and then moanings, agitation. (Infusion of cinchona, enemata, diet.)

18th. Delirium, abdomen sonorous and distended; pupils contracted; pulse small and feeble; death in the morning.

The autopsy was made on the 19th in the presence of M. Rullier, by my friend and colleague, M. Thouret. The organs appeared to us as follows.

The arachnoid is clouded upon the anterior surface of the hemispheres. The pia-mater is infiltrated here and there with purulent serosity. The substance of the brain is firm, although highly injected. The septum lucidum alone is softened, but not entirely disorganised.

The lungs, pleura, heart and large vessels, appear to be in a healthy state.

In the abdomen, the mucous membrane of the stomach is of a blackish brown, softened in the greater part of its extent; small round ulcerations are distinguished here and there, grayish at the bottom, smooth and cellular, as if the mucous membrane alone was destroyed.

The small intestines and the glands of the mesentery offer nothing extraordinary.

The large intestine, on the contrary, is the seat of a very grave chronic inflammation: swelling, thickening, injection, and frequent ulcerations of the mucous membrane.

The urethra is free; the penis is healthy and entire; the prostate is infiltrated with pus, or rather with a pultaceous matter which appears in grains, when its substance is pressed.

The two vesiculæ seminales are filled with matter of the same nature, thick and yellowish; the same in the two vasa deferentia, deeper in the left than in the right.

The two testicles are healthy.

I ask pardon of Dr. Dalmas, for not adopting conclusions which have probably been suggested by facts that I communicated to him; but it is not demonstrated to me that he had had spermorrhœa; and, even if it were, the gastro-enteritis and meningitis explained too well the symptoms observed during life, for them possibly to be attributed to any other cause: I should not dare even to admit that an abundant and prolonged loss of semen had provoked the development of these diseases. I can only see there a simple coincidence of several inflammations, among which I can perceive no other connection than that dependent upon a general disposition of the economy.

The fact is not, however, less curious, as it tends to support what I have already said, of the obscurity of the most acute inflammations of the prostate, and of the vesiculæ seminales, of the frequency of these diseases, and of the manner in which the inflammation extends itself by continuity of tissue.

No. 7.

Remarkable alteration from the urethra to the testicle.—(Dalmas, loc. cit. obs. 4.)

The last case of Dr. Dalmas contains no information of the symptoms observed during life; and I should not have spoken of it if the description of the alterations did not present some interesting details: this is the substance of it.

At an inch and a half from the neck of the bladder, stricture formed by a true cicatrix, smooth, dense, surrounded with wrinkled folds which run towards its edges.

Prostate hard, scirrhus, creaking under the scalpel, particularly on the left side. Vesiculæ seminales small, hard, formed by sacs

in a state of atrophy, containing only matter of a dull aspect, and small in quantity.

Vasa deferentia presenting swellings more and more considerable, the nearer to the testicles they are examined; filled with a homogeneous matter, pultaceous, dry, yellowish, similar to tuberculous matter, or to soft cheese: matter the more liquid and assimilated to pus, as the swelling is greater; the more dry and assimilated to tuberculous matter, as the swelling is smaller. Between these different points of disease, complete obliteration of the cavity of the vasa deferentia.

Left testicle: epididymis knotty, irregular, as large as the testicle itself; formed of swellings similar to the preceding, and filled with the same matter. Corpus Highmorianum scirrhus, formed of a dense and firm tissue, gradually losing itself in that of the testicle, which is healthy. In the tunica vaginalis, hydrocele in cysts, (*avec cloisons.*) Right testicle: epididymis of the size of a pea only, scrotal fistula terminating at the corpus Highmorianum; encysted hydrocele in the tunica vaginalis.

I need not say, that it is still more difficult to appreciate, in this case, the connection that M. Dalmas thinks he has found between the affection of the genito-urinary organs and the meningitis. Thus, it is only in reference to the anatomical lesions, that this case presents any interest.

The stricture was formed by a wrinkled cicatrix, &c.; it is a case sufficiently rare to be worthy of note; it follows from it also that an ulceration had existed there. This inflammation in the neighbourhood of the prostate, and the mechanical obstruction offered at a later period to the passage of urine, have, without doubt, caused all the other alterations.

The preceding observations excuse me from insisting upon the manner in which the inflammation of the canal extended itself to the prostate, vesiculæ seminales, vasa deferentia, testicles, and even to the vaginal tunics. This phenomena must appear sufficiently clear; but several details of pathological anatomy need some explanations.

Dr. Dalmas is disposed to think that the tuberculous matter found in the vasa deferentia, was the product of inflammation; but he advances this opinion with a great deal of caution; as for myself, long since convinced that the tubercle is nothing else but ancient pus, I still have no doubt in that respect.

We have seen, in case 5th, the pus confined at the bottom of the cells of the diseased vesiculæ seminales much more dense than that which occupied the centre of the mass, and entirely similar to tuberculous matter. This greater consistency is only owing to the absorbent vessels having acted upon the almost isolated drops of pus, before being able to exercise their influence upon the central portions of the disease. It is for the same reason that, in the same patient, the vas deferens, filled with pus, was lined with a species

of pseudo-membrane formed of concrete pus. In cases of this nature, it is always the surface of the disease which assumes the most readily some firmness, because it is the most easily deprived of the water, which alone maintains the pus in a liquid state.

In the case with which we are at this moment occupied, the largest abscesses were those in which the pus had best preserved its characters: it was in the smallest that it the most resembled tuberculous matter: which is explained by the greater or less quantity of moisture preserved by these purulent deposites, according as the absorption acts upon a more or less considerable mass.

This question of tuberculous matter is so simple and so easy to clear up, that I am surprised to see it still agitated by men the most advanced in pathological anatomy. Whoever has practised post mortem examinations to a certain extent, with a little care, must have found in the pleura, in the peritoneum, in the fallopian tubes, &c., purulent deposites, presenting every degree of consistency. In fine, if they will take the pains to moisten in a little bag the dryest tuberculous matter, they will see it liquify and become deposited at the bottom of the vessel with all the appearances of pus flowing from a phlegmon; and this deposite, submitted, after decanting, to the same trial as pus, will act precisely in the same manner. But this is not the place for entering into any more extended details upon an opinion that I see every day confirmed by the most numerous and conclusive facts.

To return to our patient, if we go back to the preceding cases, we shall see that the scirrhus engorgement of the prostate, and a part of the testicle, was produced by the same cause which determined the suppuration of the vas deferens; only, the materials deposited in the parenchyma of these organs were gelatino-albuminous. The hardened parts of the testicle were precisely those which joined the epididymis: which proves well that this alteration was a consequence of the inflammation of the vas deferens.

The encysted hydrocele was another effect of the same cause: these cysts were produced by partial adhesions organised during the acute stage of the inflammation; the serous effusion took place when this passed into the chronic state.

The vasa deferentia were completely obliterated; thus the patient was no more exposed to pollutions. Dr. Dalmas thinks, it is true, that some semen might escape by the fistula of the right testicle. I shall not examine here the importance that might be attached to such an evacuation; but I shall add that this obliteration of the vasa deferentia was also the result of the inflammation, and that the fistula must have succeeded to the opening of some abscess similar to those which existed in the epididymis of the other testicle.

Instead of regarding, as is always done, the different effects of one and the same cause, as so many distinct beings, we ought to endeavour to bring them together so as to understand the connection, and follow the modifications, according to the nature of the

different tissues, their forms, their functions, &c. It is only in this manner that we shall be able to arrive at general and precise laws.

No. 8.

Intermittent fever—anasarca—death. Profound alteration of the prostate, bladder, urethra and left kidney—induration and dilatation of the ejaculatory ducts—ossification of the vesiculæ seminales.

A patient, aged 66, became dropsical at the termination of an intermittent fever, and died in the wards of the medical clinic. His body, brought to the Ecole de Médecine, presented some alterations which we were far from expecting.

The left kidney was strongly developed, deformed, of a whitish yellow; the portion corresponding to the quadratus lumborum was very thin, hard, elastic, without any trace of normal organisation; the other half, more voluminous, had the same appearance, and besides contained six vast anfractuosités, lined by a white and very smooth membrane; another similar abscess contained a great quantity of pus: the pelvis was deformed; the orifice of the ureter was narrower than the rest of the canal: from the kidney to the bladder, it was about an inch in circumference, saving some contractions at intervals.

The bladder presented numerous columns; its walls were six lines in thickness; they were hard, whitish, as it were cartilaginous, and did not collapse upon being cut; it was impossible to recognise the different tissues which enter into their composition. The internal surface was of a dull gray, wrinkled and rough to the touch. Pus existed under the mucous membrane in several points. The neck of the bladder was open, surrounded with wrinkles like those about the anus, when studded with hemorrhoids.

The prostate was of three times its ordinary volume; it presented some granulous parts, of a dull rose colour; the rest was lardaceous and very hard. At its inferior part was a burrow which might have contained a large garden bean. The verumontanum was very prominent.

The ejaculatory ducts were of a cartilaginous hardness: there existed several bony kernels in their substance: their orifice was so much dilated, that it might have admitted a goose-quill. The vesiculæ seminales were completely ossified, of a dull white, of the form and volume of an olive stone. Two species of hydatid tumours were attached to them.

Urethra flaccid, of a wine-lees red, and very large dimensions: testicles healthy: internal pudic artery ossified through the perineum, as well as several smaller arteries in the neighbourhood.¹

It is very unfortunate that no information could be obtained upon the cause of these grave alterations. All that we can conjecture is, that the fever and dropsy have been the result of them.

¹ These notes were taken by Dr. Clement, one of my students, who is zealously occupied with the diseases of the genito-urinary organs.

We see here again the inflammation extending itself from the urethra to the kidney, by the bladder and ureter, and also to the vesiculæ seminales, by the ejaculatory ducts; it produced also in the prostate and kidney some analogous disorders.

But it is particularly the alteration of the ejaculatory ducts, and of the vesiculæ seminales, that is very remarkable. Some dilated beyond measure, contained osseous granulations: others hardened, were completely ossified: it is then probable, from this, that the patient was subject to habitual seminal losses.

This ossification of the vesiculæ seminales is the only one that has come to my knowledge; however, it is as easily explained as that of the vasa deferentia.

I shall terminate the review of the alterations of the genital organs by a fact equally curious, but in another point of view.

No. 9.

Mental alienation—belief in a change of sex—death. Thickening of the arachnoid—profound alteration of the prostate—a kind of atrophy and obliteration of the ejaculatory ducts.

This is what I find in a note relative to a deranged person, who died in the ward of Professor Rech:

The intellectual functions had been deranged for a long time; the patient imagined that he had changed sex; and, believing himself a girl, passed a part of his time writing letters to an imaginary lover: sometimes he would kneel during whole hours, apparently employed in digging the ground. He had lost entirely the sight of the left eye. His death took place in consequence of an obstinate diarrhœa.

On opening the body, we found the dura-mater healthy in its whole extent; the arachnoid had increased in thickness in several points; we discovered upon its surface something like clouds that altered its transparency. The pia-mater contained quite a large quantity of serosity, especially in the cerebral anfractuositities.

The brain was healthy in all its parts, as also were the cerebellum and medulla oblongata. The optic nerve of the right side was in a state of atrophy behind its union with the left, to the extent of half an inch; of a grayish colour, and very soft. In the left eye, a considerable effusion of serosity separated the retina from the choroid; the vitreous body, as it were, in a state of atrophy, formed an irregular and reddish button.

The lungs were healthy, as was also the heart: but the latter was remarkably small.

From the cœcum, the mucous membrane was red and thickened; the disease increased as it approached the rectum, where existed numerous ulcerations.

The prostate projected into the bladder, it was about two inches in extent in its antero-posterior diameter, and fifteen lines transversely; its tissue was exactly similar to that of the cancer *en rave*;

it contained in its substance three small abscesses. The ejaculatory ducts were soft, as it were, shrunken, and obliterated; the vasa deferentia and the vesiculæ seminales were, on the contrary, more ample than usual.

This patient succumbed to a chronic diarrhœa; the intestinal mucous membrane was injected, thickened, and ulcerated: he had lost the vision of the left eye, which was greatly diseased, as was also the right optic nerve, before its union: he believed himself a girl, and the functions of the testicles must have been abolished, since the ejaculatory ducts were shrunken and obliterated, in consequence of the disease of the prostate.

If this rare alteration of the genital organs was not the only cause of the idiotism, it must, at least, have influenced his singular character.

SUMMARY OF THE PRECEDING CASES.

Symptoms.—The two first patients are the only ones in whom seminal losses were demonstrated, and the general symptoms well described. The others are of but little importance, except in reference to the pathological alterations. It is only in these two cases that we can follow well the progressive march of the deterioration of the spermatic organs, from the first blennorrhagia to death; that we can appreciate the always increasing influence of the seminal losses upon the whole economy, particularly upon the cerebro-spinal system.

The illusions produced, in these two patients, by this last order of symptoms, are well adapted to open the eyes of practitioners upon cases of this nature. The therapeutical consequences that flow from them are so grave, that we cannot attach too much importance to them.

But how can too abundant seminal losses resemble to this degree affections of the brain or of its membranes? By what characters can we distinguish these symptoms from those which are owing to idiopathic affections? In order to discuss suitably questions of this nature, it is indispensable to take into view all the facts connected with them; but, in the mean time, we can already compare together those with which we are acquainted.

In the two first cases the cerebral symptoms are preceded, during a long period, by a notable derangement in the other functions; thus, the digestions are badly performed, the stomach can no longer support alcoholic drinks, highly seasoned or too nutritious food; constipation becomes obstinate; the intestinal tube is habitually distended with gases; coition becomes more and more rare, precipitate, then utterly impossible. The patients, discontented with themselves and others, tormented with flatuosities, from which they want to free themselves continually, avoid society and its restraints; they become averse to every thing that reminds them of enjoyments in which they cannot partake; they fall into profound melancholy, become irascible, misanthropic, hypochondriac; occu-

pied with one sole object, they manifest the greatest indifference to every thing that does not relate to their health.

The cerebral functions are not more weakened than all the others, but their derangement is followed by more grave consequences, and is more easy to appreciate. We remark very soon a loss of memory, that the thread of ideas is easily interrupted, that the least mental application directs the blood to the head. It is in such dispositions that laborious digestion, a more prolonged constipation, a distention of the abdomen with gases, &c. are induced, which end by determining congestions towards the weakened and fatigued brain.

But these congestions are accompanied with a remarkable weakness of the pulse, with coldness of the limbs, with general uneasiness, with anxiety, with agitation in all the senses, and a remarkable desire for a change of place. These are very soon followed by great paleness of the face, general debility and alarming syncope, without one part of the body being more affected than another.

Apoplectic congestions are not preceded, during tedious years, with a progressive deterioration of the economy; the pulse is full; there is tendency to repose, to drowsiness.

The patient who is the subject of the third case succumbed to a remarkable hemorrhage, supervening suddenly into the left lateral ventricle; but he had hypertrophy of the heart, and this first attack promptly caused death: it is then probable that it was not owing to the same cause, and did not present the same character, as in the first two cases.

The derangement of ideas that we have remarked in these first two patients, cannot be confounded with delirium. Every time delirium has been really observed, there existed a true meningitis. (Nos. 4, 5, 6.) The state of the intellectual functions in these two cases might perhaps bear more resemblance to dementia; but dementia is the ordinary result of mental alienation; moreover, it was always easy to obtain from these patients clear and connected answers.

Neither is it possible to confound the disorder of the digestive functions with the symptoms of a true inflammation of these organs; in all cases where these last have been observed, there really existed gastro-enteritis.

Lesions.—But it is particularly on account of the alterations found in the spermatic organs that these cases possess great interest.

The influence of the urethra upon all the organs which open into it is an important phenomenon in the history of diurnal pollutions. In order to have a clear idea of it, it is important, before all, to prove with what facility the inflammation extends itself, step by step, along the mucous membranes to parts the most remote.

Prostate.—The blennorrhagic discharges are furnished by the mucous follicles of the urethra, but especially by those of the pros-

tate; for it is there that they are the most developed and the most numerous; the prostate is indeed only made up of these follicles, united by cellular tissue.

During the first days that follow the infection, a tickling manifests itself in the urethra, followed by itching, heat, and lancinating pains, especially during the emission of urine; the secretion of the canal increases, changes its aspect, &c.; but it is only when the inflammation has arrived at the prostate that the discharge acquires all its intensity. It is, then, by that organ that it is principally furnished, and experienced patients are not deceived by it; for we see them, in doubtful cases, press the canal from the perineum to the glans, in order to squeeze out the secretion. Besides, post mortem examinations leave no doubt upon the subject.

Yet, the matter that gives rise to the disease is not deposited upon the surface of the prostate, and it is not because it contains a contagious principle, that the inflammation propagates itself so promptly from the orifice of the urethra to the mucous follicles of the prostate, for leucorrhœa, the menstrual flux, and lochia, are sometimes sufficient to provoke an abundant and obstinate running, of which the principal source is likewise in the prostate.

Neither is it the transportation of this matter from one point of the mucous surface to another that favours this propagation; for the discharge proceeds from within outwards, and the inflammation marches in the opposite direction.

Whatever it may be, the fact is constant, and it explains very well the frequency of diseases of the prostate in consequence of blennorrhagia.

Case 5th has shown us in what state the prostatic follicles are found during the first periods of an inflammation eminently acute: they were gorged with concrete, adherent pus; they formed by their union a firm and yellowish body, similar to a scrofulous tubercle; but the surrounding cellular tissue was still perfectly healthy, so that we could easily isolate them one from the other through their whole extent, and thus determine the nature and seat of the alterations.

At an epoch more advanced of the disease, we found the prostate infiltrated with pus or pultaceous matter, which pressure caused to flow out in form of grains (No. 6); thus, the cellular tissue was already invaded by the inflammation, but suppuration was not yet well established there.

At an epoch still more advanced, by slightly pressing the prostate, we made pus flow out from all its excretory ducts: it contained besides, small abscesses of the volume of a lentil or pea (No. 4). Here the suppuration of the cellular tissue had already had time to become united into very distinct abscesses.

In case 3d, the prostate was three times more voluminous than usual, and furnished upon pressure a very abundant purulent matter; it contained about thirty small abscesses, and as many miliary tubercles in a dormant state. We see here always the same

progress of the inflammation ; but long existing abscesses, instead of emptying themselves externally, are transformed into tubercles by absorption of the water that held the pus in a liquid state.

In case 1st the prostate was in part destroyed, and contained in its fibrous envelope an elastic and purulent matter, which was poured into the canal by a multitude of holes in the mucous membrane of the urethra. These holes were nothing else than the orifices of the mucous follicles, whose walls had been destroyed by suppuration.

We see, by this series of cases, how the inflammation extends itself from the urethral mucous membrane to that which lines the follicles of the prostate, then to the cellular tissue that unites them: how it there gives rise to abscesses which may empty themselves by the openings of the follicles, after having destroyed their walls, or else give place to the formation of tubercles which eventually terminate in the same way: how the prostate may become gradually dissolved, and be reduced to a fibrous shell, perfectly entire, covered by a kind of sieve, whose holes vary in form and dimension, according as the excretory orifices have remained distinct, or that several of them have become united into one by the destruction of the tissue that separated them (No. 1).

When the inflammation of the cellular tissue of the prostate is less intense it deposits there, instead of pus, an albuminous matter, which infiltrates and produces an indolent engorgement. If prompt and complete resolution does not take place, there results from it an induration of the prostate (Nos. 7, 8, and 9).

Spermatic Organs.—The frequency of what is termed *chaud-pisse tombée dans les bourses* shows, that the inflammation of the urethra propagates itself also with extreme facility to the secretory organs of the semen, and this extension takes place in the same manner. A contusion, a cold, &c. may indeed favour the development of these orchites; but their principal cause—often even their only cause—is the influence exercised by the mucous membrane of the urethra over that which lines the excretory organs of the semen.

In fact, patients and practitioners are strongly embarrassed, in many cases, to explain this appearance, and they would be still more so if prejudice did not render them ready in the way of explanations.

It is sometimes for having walked too much, or having remained sitting too long; sometimes for having worn too tight pantaloons, or for having bruised the testicles in crossing the thighs one upon the other, &c. that the disease has developed itself! But who is there that is not exposed to the action of some cause of this nature?

I grant that it is often in consequence of one of them that the patient experiences for the first time, in the testicle, a more or less acute pain, soon followed by the other symptoms of orchitis. But patients who observe themselves with care, do not fail to remark that at its commencement they experienced a weight in the inguinal region, tension and pain in the spermatic cord; on exploring

this, they find the vas deferens tumefied and extremely sensible; it has sometimes happened that the swelling of the cord has even been carried to the point of provoking a kind of strangulation in the interior of the inguinal canal.

When at a later period the inflammation extends to the body of the testicle, they attribute it to the first cause that made them remark the sensibility of the organ; it is then that the urethral discharge diminishes or is suppressed, according as the new inflammation is more or less grave; which makes the patients believe that it is that matter itself that has struck to the testicles, (*tombée dans les bourses*), and many physicians, also, that it is the suppression of the discharge that has provoked the inflammation of the testicle. They are deceived in taking the effect for the cause; but it is not less true that it is in reality the inflammation of the canal that has excited that of the testicle, and the succession of the symptoms would be sufficient to indicate the course it has pursued.

Besides, the cases that I have reported permit us to ascertain clearly this mode of transmission; and it is, indeed, on this account that they present the most interest.

When both testicles have been diseased, we have found the two excretory canals altered, (No 2.) When both vesiculæ seminales or the two vasa deferentia have been effected, we have remarked the same alteration in both of the ejaculatory ducts, (Nos. 1, 5, 8.)

When one half only of the spermatic organs has been affected, we have always been able to follow the inflammation to the orifice of the corresponding ejaculatory duct, whilst the other has been found healthy, (Nos. 4, 5.)

We have even seen the inflammation extend without interruption to the tunica vaginalis of the testicle (No. 4), or of both testicles (No. 7), according as the disease had propagated itself in one or both directions. This affection of the tunica vaginalis is easily conceived, since the alteration of the glandular tissue is readily shared by its fibrous envelope, which is intimately united to the serous membrane that lines it.

It is exactly in the same manner that the inflammation of the vesiculæ seminales has extended itself, in several cases, to the corresponding peritoneum. In the 1st and 5th cases this inflammation was very recent; the materials deposited upon the surface of the serous membrane were still albuminous, soft, and without any trace of organisation; in the 2d, the bladder was united to the rectum by *cellular* adhesions, owing evidently to the same cause.

These alterations are more interesting than they appear to be; they prove that a general peritonitis might readily arise from the diseases with which we are occupied. The ancient and circumscribed adhesions of the peritoneum that lines the bottom of the pelvis ought also to be remarked, as proofs nearly certain of a former acute inflammation of the vesiculæ seminales; they may

aid much then in the explanation of the symptoms observed during life, when the disease of the spermatic organs has become dissipated or leaves but slightly apparent traces.

However it may be, these alterations of the peritoneum and tunica vaginalis prove that the inflammation has propagated itself by *contiguity* of tissue.

But it is important to examine, with still more detail, the state of the different parts of the spermatic organs.

Ejaculatory ducts.—In the patient who forms the subject of the first case, the orifices of the ejaculatory ducts, instead of being circular, formed *an elongated and ragged slit*. These ducts themselves were very large. The same enlargement was noted by Stoll (No. 4); it was much more extraordinary in another patient (No. 8), since this opening would have admitted a goose quill. In all these cases there existed other much more grave diseases; but it is easy to conceive that the dilatation, or the erosion of the kind of sphincter which terminates the ejaculatory ducts, may of itself alone have a great influence over the production of diurnal pollutions, and I should not be surprised if we should sometimes find no other alteration capable of accounting for it.

The ejaculatory ducts participate ordinarily in the alteration and dilatation of their orifices: but, in addition, they may become isolated, as it were dissected, by the suppuration of the prostate (No. 1); or else thickened, hardened, cartilaginous, and may even contain osseous granulations (No. 8). These alterations, by far more grave than those of the orifices, must favour much more the involuntary emission of seminal matter. These canals having lost their elasticity and even the possibility of contracting, can no longer force the semen back into the vesiculæ seminales; or at least they are incapable of retaining it, if these reservoirs contract ever so little or are compressed.

The pressure exercised upon these ducts by the tumefied tissue of the prostate, may give rise to their atrophy and obliteration (No. 9), whence results again the more or less complete loss of function.

Vesiculæ seminales.—It would appear that the pus formed in the vesiculæ seminales must be readily expelled; but these two cul de sacs, with ramified cells, are placed upon the sides of the direct path of the semen, in order to serve as reservoirs; they do not communicate with the vasa deferentia and the ejaculatory ducts except by a quite narrow opening, before which the seminal fluid passes in its course from the testicle to the urethra: it appears that the swelling produced by the inflammation may narrow this opening of communication sufficiently to become an obstacle to the flow of the pus during a greater or less length of time; for in case 5th it had acquired a considerable degree of firmness; and that at the bottom of the cells was still more concrete, entirely similar to tuberculous matter. The pus may even remain until the water be

more completely absorbed: we only find then a yellowish homogenous matter, soft like plaster, and even cretaceous, the true origin of which is completely misapprehended.

It is almost useless to remark, that the presence of the pus is opposed to the introduction of semen into the reservoirs destined for it, and becomes of itself an immediate cause of diurnal pollutions. We conceive, also, very easily, that after its expulsion the walls of the vesiculæ must be engorged; that they may always remain indurated, deformed (No. 1), thickened (No. 3), cartilaginous, and even bony (No. 8). In the most favourable cases, the internal membrane must preserve for a long time an unusual sensibility, the influence of which cannot be otherwise than very injurious.

It is not, in other cases, necessary to find alterations so grave in the vesiculæ seminales, to account for the spasmodic and inordinate contractions of which they are sometimes the seat, and for their influence upon the production of diurnal pollutions; but it was useful to study well those the most strongly marked, in order to appreciate better the others.

The qualities of the semen found in the vesiculæ seminales ought to be also carefully noted: we found it similar to *meconium* in one of these reservoirs, whilst pus existed in the other (No. 5). It is probable that the alteration of the products of this testicle was due to an influence similar to that which had acted upon the other half of the prostatic organs in a more marked manner.

Vasa deferentia.—Neither is the pus formed in the vasa deferentia always easily expelled. The tumefaction of the walls may induce complete obliteration of the cavity in certain points, whilst in others it becomes distended with an accumulation of pus; so that these pouches more or less dilated, separated by strictures more or less extensive, resemble irregular strings of beads. This disposition may extend to the epididymis, and even to the *cordus Highmorianum*, the mucous membrane of which is continuous with that of the vas deferens on one hand, and on the other with that of the secretory ducts (No. 7).

The pus thus confined, submitted for an indefinite length of time to the action of the absorbent vessels, dries more and more, and gives rise to what are called *deposits of tuberculous matter*, the aspect and consistency of which may present every variety of appearance in the same individual, according to the antiquity, dimensions of the purulent abscess, &c.

It follows, also, from this obliteration of the vasa deferentia, that the semen is retained in the testicles; by consequence, that the procreative power is destroyed; but it does not necessarily follow that the patients are freed, on that account, from seminal losses. If abscesses of the epididymis open outwardly, we can conceive that the semen would then escape by this rupture of the excretory canal, in proportion to its formation by the secretory vessels, and thus constitute a true spermatic fistula (No. 7): if the same alteration

existed on both sides, it is clear that the patient would be exposed to the same phenomena as those suffering from diurnal pollutions.

If the obliteration of the excretory duct is not followed by any rupture, it is probable that the secretory organ, after having been a long time distended, swelled, and painful, will gradually diminish, and at length become completely wasted, like other glands under the same circumstances. It is thus that certain states of atrophy of the testicles may be explained, succeeding very painful and prolonged swellings of that organ.

When we feel the vas deferens hard and knotty, there can be no doubt as to the cause of that atrophy. But sometimes the alteration takes place in parts concealed from sight and touch (No. 9); then the state of the prostate may furnish important information. When it is found unequal, tumefied, and voluminous, the atrophy of the testicles must be regarded as the consequence of the compression of the ejaculatory ducts.

In a soldier, whose history I shall relate, the testicles were not larger than those of a child of six years; the patient had felt there for a long time dull and incessant pains: the prostate was much diseased; the moral powers had experienced the same changes as in cases of diurnal pollution, but the physical were not so much weakened, a fact very readily explained.

The slow atrophy of the testicles, in consequence of more or less acute pains, prolonged for a greater or less length of time, is not very rare; these pains are ordinarily regarded as nervous, and until the present time the insensible wasting that follows them has not been explained in a satisfactory manner. All the patients of this kind that I had occasion to see had had blennorrhagiæ. I am convinced that these absorptions were the remote but direct consequence of them.

We find often, in patients who have had hernia humoralis (*chaude-pisse tombée dans les bourses*) the vasa deferentia thickened, hardened, cartilaginous, gravelly, and even entirely osseous (No. 2). These alterations confirm what I have said of the mode of transmission of the inflammation from the urethra to the testicles, for all these varieties of induration are so many results of inflammation.

Testicles.—Every body knows with what slowness engorgements of the epididymis and corpus Highmorianum are dissipated at the termination of these orchites. That alone would suffice to prove that it is by the vas deferens that the inflammation had arrived at the testicles; since it is at this point that the secretory vessels unite in order to terminate in the excretory duct. It is not, then, astonishing that this portion of the testicle should be more seriously diseased, and often, indeed, the only one compromised (No. 7).

Purulent collections formed in the testicle (No. 4) cannot, like the preceding, escape by the excretory ducts, and the fibrous envelope that retains the secretory vessels is very firm; it must, then,

happen quite often, that inflammations of little intensity, and well circumscribed, become arrested before suppuration has had time to manifest itself externally. Then, if absorption does not take place promptly and completely, the thickest part of the pus forms tubercles, whose presence, in their turn, causes new inflammations; and the secretory vessels of the semen may, like the follicles of the prostate, become gradually destroyed, so that the gland may be reduced to its envelopes.

But it is not pus alone that may be formed in the cellular tissue of the testicle. When the inflammation is slight, but prolonged, or often renewed, it deposits there a gelatino-albuminous matter, which thickens and becomes the source of organic changes similar to those of the prostate, and of which the first cause goes back, oftener, to chronic affections of the urethra too long neglected.

I have considered it important that the manner in which inflammation is transmitted from the urethra to the testicles should be well established; for this, once settled, explains in the simplest manner, why the prolonged presence of a catheter in the canal, the existence of a stricture, &c., provoke so often the engorgement, inflammation of the testicle, and even sometimes the development of certain hydroceles; how the disappearance of the cause is ordinarily sufficient for the removal of these accidents.

But the union of all these facts is eminently of importance in the study of diurnal pollutions: for the intimate connection of the urethra with the testicle, by means of the excretory ducts, would be sufficient to enable us to foresee the influence that the state of the mucous membrane, surrounding the orifice of the ejaculatory ducts, must have over the secretion and expulsion of the semen.

Urinary organs.—Exactly similar phenomena have presented themselves in the secretory and excretory organs of the urine.

The inflammation commencing in the urethra has propagated itself to the kidneys by the bladder, the ureters, and the pelvis; it has even been easy uninterruptedly to follow the traces of it. Hence, the violaceous injections, the species of ecchymosis, and even the ulcerations of the mucous membrane that lines these organs (Nos. 1, 2, 3, 4, 5, 8), hence the swelling and redness of the kidneys (No. 4), hence the abscesses of all dimensions and epochs, encysted or not encysted (Nos. 1, 3, 8), mingled with immature or suppurating tubercles (No. 3), which have been found in the kidneys.

In consequence of these successive inflammations we have seen the proper tissue of the kidney become destroyed like that of the prostate and testicle (Nos. 1, 3, 8), and almost reduced to its external fibrous envelope.

There is, then, a complete similitude between the lesions of these two orders of organs. If the kidneys were accessible to our senses as are the testicles, this resemblance would appear still more striking.

Comparison.—We often see, in consequence of a cold, an excess of drink, &c., a blennorrhagia diminish or cease entirely, and at the same time the patient experiencing violent and deep-seated pains in the loins; the urine becomes at the same time very scanty, deep-coloured, sometimes bloody, &c. If we could, then, explore the kidneys as easily as the testicles, we should find, perhaps, that nephritis succeeding blennorrhagiæ are as frequent as orchites.

Certain it is, that, in the preceding cases, the disorganisations of the kidneys have been more frequent than those of the testicles. But it is not only in consequence of blennorrhagiæ and strictures that this influence manifests itself: every inflammation of the urinary passages has a tendency to extend itself to the kidneys; this is why acute or chronic cystitis, the presence of calculi, &c., are so many causes of inflammation of these glands; this is why the kidneys are so often disorganised when the bladder has been a long time tormented by the presence of foreign bodies, by repeated retentions of urine, &c.

I think I have amply shown with what facility acute inflammations of the urethra extend themselves to the secretory organs of the semen and urine, by the way of their excretory ducts. I have constantly instituted a parallel between the phenomena that were transpiring in the two orders of functions, because they have presented themselves at the same time, with nearly the same degree of energy, and with analagous characters. But this similitude is not alone observed in cases of acute inflammation; it is only more easy to demonstrate, and it is for that I commenced with them; but similar phenomena are observed under the influence of less energetic causes.

When the bladder is irritated by any cause whatever, the secretion of urine increases, and changes its nature; at the same time it is more abundant and more watery, and remains a less length of time in the bladder. The desire to urinate is felt oftener and with more energy; however desirous the patient may be not to yield to it, the sensation is so painful and the bladder contracts with so much violence, that the urine is sometimes expelled, in spite of all the efforts of the patient, and that, too, before he may have had time to prepare for it. The urine is rendered each time in small quantities, its jet is short, feeble, embarrassed, and falls at a little distance from the feet. If this state continues a long time, the muscular membrane becomes more developed, the walls of the bladder thicken, and its capacity diminishes in the same proportions.

Those who have remarked the coincidence of this limpidness of the urine with its frequent expulsion, have concluded from it, that the more watery it was, the more irritating it became to the mucous membrane. But it is impossible to admit that the urine is the more irritating in proportion as the quantity of salts it holds in solution is diminished. It is evident that the effect is here taken for the

cause. It is because the bladder is irritated, that it cannot support a long time the presence of urine; this is more watery because the irritated kidneys secrete a greater quantity of it, and because it remains less time in the bladder. This is so true, that, when the mucous membrane enjoys its ordinary sensibility, it can support for a long time the presence of a great quantity of watery urine, as is seen every day after repasts.

If this irritation is prolonged, it may induce, finally, a kind of relaxation of the secretory vessels, and degenerate into diabetes. Then the urine loses entirely its chemical characters; the urea and uric acid are replaced by a saccharine matter; the economy becomes exhausted by furnishing such an abundant secretion, &c.

We observe exactly the same phenomena in the spermatic organs, when they are submitted to the influence of a similar irritation. The testicles secrete a greater quantity of semen because they are irritated; this semen is more watery because it is less elaborated, and remains less time in its reservoirs; it is more promptly expelled because the vesiculæ seminales are more sensible to the impression produced by the presence of the spermatic fluid, and act more readily.

The spasmodic contractions of which they become the seat, commence by provoking the discharge too promptly, either in the venereal act, or in consequence of lascivious dreams; which render coition precipitate, incomplete, and nocturnal pollutions very frequent. At a later period, the weakness and sensibility increase, the semen becomes more abundant, more liquid still, the convulsive contractions of the vesiculæ seminales are oftener repeated; then the approach of a woman, or merely a voluptuous picture, an erotic thought, are sufficient to excite a discharge; but the semen is no longer thrown out with energy, erection is never complete, and there is scarcely any pleasure.

These fatal contractions end in being excited by causes still less direct; the patients feel them coming on at a time when they are thinking the least of them; they fear the consequences, and yet cannot prevent them. In fine, there are cases in which the weakness and susceptibility of the genital organs are carried to the point of constituting a true spermatic diabetes, as well by the quantity and quality of the fluid secreted, as by the frequency of its emission.

We have not been able to make, upon this altered semen, the same chemical experiments as upon the urine of those suffering from diabetes; but it contains no more spermatic animalculi, than the other contains of urea. And let no one think that this analogy is alone founded upon theory; it really exists in practice. I am at this moment attending a patient who is dying, exhausted by a diabetes, and by diurnal pollutions of the same character. I shall report elsewhere this remarkable case.

Here are, then, under the empire of the same causes, the kidneys and the testicles, the bladder and the vesiculæ seminales, which act

in the same manner and produce analogous effects. I will say further, it is very rare that these affections exist separately.

Thus, in cases of strictures, it is the urinary passages that are principally affected, but we have seen that the spermatic organs were almost as much so; and it is not inflammation alone that propagates itself in these two directions; so does also simple irritation of the urethral mucous membrane.

Diurnal pollutions are too little known, to have been remarked in these cases which are always obscure, and where the attention, also, is fixed upon another object; but I have so often ascertained their existence as a sequel of stricture, that I regard the seminal losses as the real cause of the hypochondriasis, ischuria, debility, &c., ordinarily attributed to the affection of the urinary organs: what proves it is, the weakness and infrequency of the erections, the promptness of the discharges, the limpidness of the semen, &c., observed in the greater part of these patients.

It is quite rare that diurnal pollutions are not complicated with chronic catarrh or irritation of the bladder; it is this, indeed, which renders the diagnosis very often difficult, not only on account of the presence of the symptoms peculiar to catarrh, but also on account of the mucosities secreted by the prostate and the bladder. This is why, when I see the urine troubled, I always direct my questions with reference to diurnal pollutions, although I do not confound these mucosities with semen.

It is very remarkable, also, that those who give themselves up to venereal excesses, or to masturbation, experience frequently a desire to urinate, which has caused the ancients to say, *rard mingitur castus*. I have always been struck with the truth of this axiom: it proves with what facility the urinary organs partake of the excitation of the spermatic organs.

Another very important fact in the history of diurnal pollutions, proves how exact is the analogy between the irritation of the bladder and that of the vesiculæ seminales. It is almost always at the end of the emission of urine that the semen escapes: the bladder then contracts with energy, in order to expel the last drops of liquid; the vesiculæ seminales likewise begin to act, and cause a greater or less quantity of spermatic fluid to flow out with the urine. They are wrong who attribute this viscous matter to the prostate, because it does not present all the qualities of ordinary semen; the evacuation sometimes is very abundant, and the semen, in this case, cannot be mistaken. Besides, when the patients have their attention fixed upon this phenomenon, they know very well how to appreciate the contractions of the vesiculæ seminales: they are, indeed, generally in proportion to the amount of the loss.

The greater number also observe, that when they are menaced with a relapse, it is preceded with a more frequent and imperious desire to urinate, whether this increase of sensibility of the bladder manifests itself in consequence of a cold, or succeeds an excess in

drink, coition, &c; which proves that the same causes act at the same time on the two orders of organs.

The patients affected with diurnal pollutions, experience, in general, very injurious effects from diuretics.

Almost all those who have taken squills, nitrate of potash, digitalis, &c., have observed, during their use, a remarkable increase of the seminal losses, and some, after having been cured for a greater or less length of time, have had relapses which could not be attributed to any other cause, and which were spontaneously dissipated as soon as the patients renounced the use of these medicines.

It is indeed worthy of remark, also, that children, subject to incontinence of urine, are particularly exposed to nocturnal pollutions at the epoch of puberty; and at a later period, to diurnal pollutions.

In fine, I cannot terminate this parallel without remarking here, that the obliteration of the seminal ducts may be followed by the formation of spermatic fistulæ, as strictures of the urethra give rise to urinary fistulæ, (No. 7.)

To sum up the whole, all the mucous surfaces of the genito-urinary organs have the greatest analogy and most intimate connections one with another. It is by them that the inflammation extends itself, step by step, to the secretory organs of the semen and urine. The portion of this membrane that lines the prostate being in intimate connection with that of the mucous follicles, ejaculatory ducts, and bladder, is that whose different states may have the greatest influence over all the others. The relations of this prostatic surface with the ejaculatory ducts, give to it particularly a great importance in the study of the different seminal losses; for every sensation felt at the orifice of an excretory duct is easily transmitted to the secretory organ.

This transmission takes place by the membrane that lines the excretory duct; it is not the result of a *sympathetic* connection, such as that which exists, for example, between the uterus and the mammæ.

The excretory duct, charged with this transmission, must necessarily itself partake of this influence: the visiculæ seminales cannot, then, remain insensible to the impression that they transmit to the testicle; which is important to be considered, seeing that these reservoirs are the agents of the spermatic emission, as the bladder is of the expulsion of the urine.

We shall often have occasion to apply these data to the study and treatment of diurnal pollutions. In the mean time, it is well to remark, that the influence of the excretory ducts upon the secretory organs is not an isolated phenomenon, exclusively peculiar to the kidneys and testicles, but the result of a general law, applicable to all the glands.

In fact, suction excites the secretion of milk, and changes its quality: the first drops that flow from the nipple are watery; the

milk becomes then more abundant and better elaborated, in proportion as the suction continues.

The introduction of a foreign body between the eyelids increases the secretion of tears : sometimes even they change their nature, to the point of irritating and excoriating the skin of the cheeks.

The presence of food in the mouth increases the secretion of the salivary glands, particularly if it is stimulating, spiced, &c.

During digestion, the liver and the pancreas increase their secretions : the action of emetics and purgatives produce the same effect.

The ejaculatory ducts open upon the surface of the prostatic mucous membrane ; ought we then to be astonished at the important part it plays in the production of seminal losses ?

CHAPTER III.

BLENNORRHAGIÆ.

No. 10.

Age 20. Lymphatic temperament—blennorrhagia—orchitis—nephritis—nocturnal and diurnal pollutions—abuse of mercurials—injurious effect of cold and tonics—leeches, flannel, milk, cure—new blennorrhagia—same treatment, same result.

The first case of diurnal pollutions I had occasion to treat, was that of a student in medicine, of great intelligence, who studied his disease with much exactness, and described to me the causes and symptoms with unusual clearness. I desired him to leave its history with me : the following is as it was put into my hands.

I shall only remark that he was of a temperament eminently lymphatic ; that he had red hair, pale face, white skin, habitually cool and even cold ; that his form was slight and emaciated, his chest narrow, his voice soft and feeble.

“ I am twenty years of age, and have never had any other disease than the one of which I am going to give you the history.

In January, 1821, I contracted a blennorrhagia, the treatment of which consisted of emollient ptisans, general baths, and thirty-two grains of sublimate. In the month of April of the same year, some doses of the potion of Chopart put an end to this discharge, which lasted four months.

Scarcely cured six weeks, I contracted a new blennorrhagia, (eight grains of sublimate, four grains of muriate of gold.) In September, a ride on horseback occasioned a swelling of the left testicle, (repellents, such as the vapor of vinegar, cutler's earth, &c.) The engorgement became in a great degree dissipated ; but there remained a relaxed state of the scrotum ; whence resulted painful draggings in the spermatic cords, which were relieved by the application of a suspensory bandage.

At the commencement of 1822, the discharge still continued : I employed local astringents, fifteen general mercurial frictions, the hydriodate of potash in frictions upon the testicular tumour, four hundred pills of the sublimate in doses of one tenth of a grain : the discharge diminished, but did not entirely disappear.

Whilst I was taking all these medicines, being lightly clad for the season, I exposed myself to a severe cold, that suppressed the perspiration of the feet, and brought on pains in the kidneys, ordinarily obtuse, but which became acute when I was again exposed to the cold.

At about the same period my digestion became laborious. Attributing this languor to weakness of the stomach, I endeavoured to rouse it by stimulating food, by the use of rhubarb and generous wine ; but the use of these different means only increased my troubles. About the month of June, 1822, they became insupportable ; as soon as food reached my stomach, I experienced a tightness in the whole base of the chest and under the sternum, with difficulty of breathing, general lassitude, and sometimes a desire to vomit : my tongue was white and clammy ; my belly constantly distended with wind ; I had an obstinate constipation, and at times slight faintings ; no reading could fix my mind, (five purgatives in ten days, nitrated ptisan, diet.) These means rendered me still more ill than ever.

Although I never experienced the sensation of hunger, I ate much to repair my strength ; but my digestion was only more difficult, and I felt overburdened by it : I endeavoured to assist my stomach by the aid of coffee ; I took it after all my meals : with the same view I went to the river to take a bath every morning ; but I could not remain in the water more than a quarter of an hour without trembling in all my limbs : when I came out no reaction took place, and I remained a very long time unable to get myself warm ; yet I perceived that ice creams did me good, and I took a great many.

The discharge still continued in a slight degree ; it was particularly in the morning on getting out of bed, that I perceived, at the urinary orifice, a drop as large as a pea of a viscous, stringy, and pearly matter : a part of this matter, remaining in the canal, was driven out by the first urine from the bladder ; it remained suspended in the liquor in the form of flakes, which finally were precipitated to the bottom of the vessel.

Near the close of 1822, as soon as the cold weather came on, my condition became aggravated ; all the symptoms I have described increased ; I became sad, prejudiced, always uneasy, without motive to action, and very timid. I had chills, especially when I exposed myself to the cold ; I felt them start from the inferior extremities and extend over the whole body ; then I experienced more intense pains in the kidneys ; I urinated frequently, and it was only with difficulty that I expelled the last drops of urine ; they were viscous, and a part of it was always spilled upon my shirt and

into my pantaloons; I had neither erections nor venereal desires. I passed semen often during sleep, without lascivious dreams, or the least erection of the penis; I experienced an irresistible desire for sleep.

At the commencement of 1823, I perceived in my urine an abundant sediment, earthy, of a fawn colour, of which one part became deposited upon the walls of the vessel, whilst the other gained the bottom, mingled with small red concretions of the size of the head of a pin, similar to coral powder.

About the end of February, my condition had become insupportable; it was then only that, according to your directions, I commenced the following treatment: twelve leeches to the anus, cold lotions upon the perineum and scrotum, three times a day; a pint of iced milk; flannel jacket upon the skin; progressive decrease in the quantity of wine taken at each repast, then complete abstinence from every fermented liquor. Some days afterwards, I experienced a notable change in my health; my digestion had improved; the lumbar pains and lassitude disappeared. I became less sad, less timid, more active, and I commenced study with ardour: my genital parts acquired vigour; I threw aside my suspensory bandage: no deposits in the urine: the erections reappeared. (Second application of leeches, fifteen days after the first: continue treatment during two months.) At that epoch, that is to say, at the end of April, my health was in the best state: the approach of summer was sufficient to continue it so: I wore, however, the flannel jacket until the middle of summer without being incommoded by it.

In the month of July, 1823, third blennorrhagia which did not in any way derange my general health: one month after its appearance, I treated it successfully by an application of leeches, and the balsam copaiva in small doses; when I took too much of it I felt again vivid pains in the kidneys.

Sea bathing, which I practised during the whole month of September, contributed not a little, I think, to strengthen my genital parts.

The reduction of the atmospheric temperature during the month of November made me resume the jacket and woollen stockings; I experienced already constant chills, and an acute pain in the kidneys; I found myself menaced with a relapse into the state from which I had just escaped.

I am obliged, at least during winter, to take milk every day and to abstain from spiced meat, as well as wine, under penalty of having my lumbar pains re-appear, and an obstinate constipation, burnings in the urethra, a slight discharge, a sediment in my urine and inconvenient itchings in the external genital parts; I must not remain stationary when exposed to a moist cold of the least intensity. It is by taking all these precautions that I have the happiness of enjoying satisfactory health."

M. N. was afterwards appointed by means of the *concoure*, surgeon in chief of a very important hospital, which proves that he

was able after his case to give himself up to severe study. I have seen him several times, and have learned from him that his health was perfect, but that it was necessary for him to protect himself with great care against the least impression of cold and against all undue excitement of the digestive organs; thus, for example, he is obliged every winter to return to milk, to the mildest and lightest aliment, and to the use of pure water at his meal.

The patient having a blennorrhagia, mounts on horseback; very soon after he is attacked with orchitis; painful draggings are felt in the spermatic cords, and that too long a time after the cure: it was then by the *vas deferens* that the inflammation transmitted itself from the mucous membrane of the urethra to the testicle, as has been demonstrated by myself in a great number of autopsies.

A short time after exposing himself to cold the perspiration of the feet becomes suppressed, and pains of the kidneys manifest themselves, &c. In writing this phrase, the patient was not probably thinking of the secretory organs of the urine; yet, they must in reality have been the seat of pains, for, at this same time, the expulsion of the urine became very frequent, the last drops were expelled with difficulty, its composition was entirely changed, &c.

If we recollect the numerous cases in which we have been able to trace the phlegmasia from the urethra to the proper tissue of the kidney, through the bladder, ureter and pelvis, we cannot doubt that the inflammation of the canal extended itself in the direction of the urinary organs in the same manner as in the spermatic organs, that is to say by way of the excretory ducts: thus the two orders of symptoms have constantly undergone the same vicissitude.

In fact the urine deposited an abundant, earthy sediment, containing at the same time semen in suspension. The bladder had become more sensible to the impression of the urine, since the desire to urinate was oftener renewed, and in a more imperious manner: the *vesiculæ seminales* were exactly in the same condition, since the semen was rendered during sleep and without erection. In addition, the contractions of the bladder finally brought on those of the *vesiculæ seminales*, as the last drops of urine, expelled with so much difficulty, were viscous, &c. The two orders of symptoms ceased, re-appeared, and were cured at the same time. They were owing to an inflammatory state, for the anti-phlogistic treatment was the only one which succeeded.

The injurious effects of cold were well marked in the case of M. N.: we may attribute it to his constitution eminently lymphatic; yet we shall have occasion to remark similar phenomena in patients endowed with a very different temperament. However it may be, I am well convinced that without the habitual use of flannel, M. N. would not have succeeded in protecting himself against new relapses and in strengthening his constitution.

M. N. adopted numerous anti-venereal remedies, although he never had any other disease than blennorrhagia; he experienced

from them effects the more injurious, as his constitution adapted itself but poorly to the use of mercurials. We find these injurious notions adopted by many practitioners.

M. N. fell into other errors much more common, because they are the ordinary result of a false logic almost inevitable on the part of the patient. Perceiving that they are growing weak, they eat much to repair their strength, and they select the most nourishing food; the digestion goes on with difficulty and is accompanied with a development of gas, because the stomach partakes of the general weakness; then they have recourse to generous wines, spices, rhubarb, &c.; hence arises the chronic gastritis which so often accompanies pollutions of long standing.

The intellectual functions languish like all the others, the patients are habitually drowsy, then they resort to tea, coffee, &c. to arouse themselves.

In fine, M. N. has, as many physicians do, *treated the symptoms*, and has allowed himself to be influenced by the names imposed upon medicines. The urine was muddy, contained a sediment, and was passed with difficulty; for this he took nitrate of potash, as a *diuretic*, without reflecting that the increased secretion provoked by this medicine, was the result of an excitation of the urinary organs, and that his were already too much irritated. Being constipated, he took purgatives without seeking the cause of this constipation, without troubling himself as to the effect that the irritation of the rectum would produce upon the bladder, the prostate and vesiculæ seminales: these errors are committed every day under the same circumstance.

But what is still more common, is the abuse of *cold* in cases of nocturnal and diurnal pollutions. In taking the river bath, M. N. only followed the precepts given by every one that has written upon this subject: he was injured by it, and that inevitably: his genito-urinary mucous membranes were too highly irritated not to experience injurious effects from the immersion of the body in cold water: he ought to have foreseen this result from the bad effects that cold had always produced upon him. On the other hand, he was too feeble to experience a suitable reaction after the bath. We shall see, that cold baths, employed *indiscriminately* in all cases of seminal losses, have done much more injury than good.

Yet the patient *thinks* that sea bathing gave tone to his genital parts, and, unquestionably, he employed this doubtful form of expression, because he could not satisfactorily explain these two effects so diametrically opposed to each other: nothing however is more simple. When he resorted to sea bathing he was cured: the irritation of the genito-urinary organs had passed away, his strength was restored; the first impression of the cold then could no longer be injurious; and the consecutive reaction would be readily established. It is true there exists a great difference between sea and river bathing; but it is particularly to the state of the diseased organs and to the degree of vigour of the economy that must be attributed the opposite results produced by the cold.

For not having made this important distinction, general propositions have been laid down upon the employment of these powerful agents, the application of which is every day followed with the most disastrous results.

No. 11.

Blennorrhagia, followed by irritation of the kidneys, bladder, spermatic cords, then by nocturnal and diurnal pollutions, alternating with sore throat—cold lotions, &c.—Cure.

M. T., of Cette, aged fifty-four, of a nervoso-sanguineous temperament, much inclined to the venereal act, contracted a blennorrhagia for which an empiric prescribed enormous doses of the powder of cubebs: the discharge ceased, returned, and disappeared again; but an intense irritation of the bladder manifested itself very soon; the emission of urine became frequent, accompanied with pains and spasms, especially after the expulsion of the last drops of urine; there came on dragging pains in the kidneys, thighs, and the spermatic cords; heat and weight in the perineum: nocturnal pollutions took place more and more frequently: at length, the patient perceived that in going to stool he passed a great quantity of grumous matter, with the odour of semen.

Very soon after, heaviness of the head, dragging pains of the stomach, no appetite, derangement of the digestion, decrease of strength, alteration of the face, cessation of the venereal desire, fatiguing insomnia, increasing sadness, profound melancholy.

At a later period the irritation of the genito-urinary organs was replaced by a sore throat, which ceased when the first symptoms reappeared. These alterations were thus repeated several times.

In fine, at the end of two years, the patient consulted Dr. Clement, who advised frequent lotions upon the genital parts with iced water, hip baths of salt water, iced drinks, and a light regimen. This treatment, adopted during the hot days of summer, caused the nocturnal and diurnal pollutions to disappear: a short time after M. T. recovered his former vigour.¹

It is needless to point out how much this case resembles the preceding; only the affection was more simple, more recent, the constitution of the patient more robust; the action of the cold was also very advantageous and very prompt.

No. 12.

Masturbation—Blennorrhagia—Diurnal pollutions—Failure of the ordinary means—Cauterisation of the prostatic portion of the urethra—Prompt cure.

Alexis Poit, seaman, aged 20, short stature, sanguineous and corpulent, came to the Hotel-Dieu of Montpellier in 1822, to be cured of a venereal affection, which he said he had in the body, from the

¹ This case was communicated to me by Dr. Clement, of Nice.

commencement of a gleet, contracted three months before, and cured in a few days without any other treatment than a ptisan of couch-grass (*chiendent*).

Nothing externally confirmed this assertion: the patient complained of violent headaches, of pains in all the bones, of frequent spasmodic tremblings in all the limbs, of a continual agitation, which prevented him from enjoying a moment's sleep; dizziness, vertigo, accompanied with ringing in the ears; suffocations, palpitations, and itching of the skin; his eyes were red, dry, sensible to light, &c.

The pains in the bones were the only symptoms which could lead us to suspect a venereal disease; the patient said he suffered more during the night, but his replies were very obscure, and often contradictory. However it may be, the skin was hot, dry, and covered with pimples. I prescribed blood-letting, a bath, and cooling ptisans.

The next and the following days no change; the patient appeared more and more persuaded that he had the pox in the body. His constitution appeared robust, his countenance indicated health, his replies were obscure and often contradictory: I thought at first he had some motives for feigning different diseases; but as he did not eat, and appeared disposed to bear moxas and other means of the same nature, I observed him more closely. The students regarded him as a hypochondriac, a melancholic, or a maniac, because he complained of a fixed pain in the epigastrium, although his tongue was neither red nor dry; because he said he heard a continual noise in the belly, and felt the intestines bound, as with iron, for several hours, and then suddenly loosened.

When this sort of strangulation took place, he felt something that ascended to the epigastrium and suffocated him: this suffocation ceased all at once; then he passed both ways a great deal of wind. He was habitually constipated, and with great difficulty expelled hard and very fetid matter; he urinated very often, and with difficulty, and complained of pains in the penis and bladder, pains that he attributed to the suppression of his discharge: (twelve leeches to the anus, a bath,) decrease of the pains in the penis and bladder. I urged the patient to get up and walk, but he pretended that his limbs could not support him, and passed all his time in groaning and sighing, his head concealed under the coverlid.

Having observed the most of these symptoms in almost all my patients affected with diurnal pollutions, I interrogated Poit on this point. But he affirmed that he had never seen any thing that resembled semen, either in urinating or in going to stool. Besides, he had never had any connection except with the woman who had given him the disease, and three times only in the space of eight days.

From the manner in which he deplored the momentary misconduct to which he owed all his troubles, I thought that he was given to masturbation: he obstinately denied it before the students, but

informed me afterward that he had in fact given himself up to it from the age of ten years, and even five or six times a day. He experienced then a very vivid tickling, unaccompanied by any emission, and which was very soon changed to a painful burning. About the age of twelve years, having perceived that these fatal enjoyments were affecting his health, he became more reserved; but at fourteen he abandoned himself to them anew with a kind of fury; the irritation was often carried to a painful degree; the cords of the spermatic vessels became engorged; there existed in all the body, particularly in the loins and articulations, a great weakness, accompanied with contusive pains, continual vertigo, and ringing in the ears; his memory was weakened, &c.

From sixteen to eighteen he had gradually refrained from this habit, and gained some strength and embonpoint. It was at this period that he had, for the first time, connection with a woman. Very soon succeeded the discharge in question.

I advised the patient to preserve his urine, and to observe carefully what took place in regard to the penis, on going to stool. I found the urine red, thick, fetid, muddy with flocculent cloud that floated suspended in the fluid; the walls of the vessel were lined with a brick-like powder; a glairy and ropy sediment adhered to the bottom. The patient had observed that the last drops of urine, thick and viscous, were expelled with difficulty, by brisk and involuntary contractions of the bladder. After having been to stool, he had found a thick granulous and transparent matter at the orifice of the urethra.

I prescribed milk three times a day, as cold as possible, diluted with spa or lime water; a vegetable diet; two cold hip baths, of a quarter of an hour's duration; cold lotions three times a day; two cool glysters, one in the morning and one in the evening, in order to facilitate the stool.

These means, that I had seen recommended by Wickman and Sainte-Marie, and with which I had succeeded at other times, produced no amelioration in the symptoms; the patient became more unquiet, more chagrined than ever; he did not sleep more than an hour in the night. The emollients and leeches had assuaged his pain, but relaxed the tissues; the patient suffered less, but he lost a greater amount of semen. The tonics, cold, &c. diminished for a time the seminal discharge, but very soon increased the irritation.

After about three weeks of fruitless trial, I renounced all these general means, convinced that the spermorrhœa was owing to a chronic inflammation of the prostatic mucous membrane, the influence of which had extended to the ejaculatory ducts, vesiculæ seminales, &c. I thought that by inducing a new action in this membrane by cauterisation, I should subdue the irritation of the spermatic organs, and particularly the spasmodic contractions of the vesiculæ seminales.

The favourable results that I had obtained from the nitrate of silver in analogous cases, removed my fears as to the danger that

was said would result from cauterisation of the prostatic portion of the urethra, on account of the vicinity of the bladder. However, in order to empty this cavity and take the exact length of the canal, I had to catheterise the patient.

Scarcely had the catheter penetrated an inch or two into the canal, before it determined violent contractions of the urethra that prevented it from advancing, and might have excited suspicions of the existence of a stricture. After some moments this spasmodic action ceased, and the catheter penetrated further, and so on successively, to the neck of the bladder. There the pains and contractions redoubled; the bladder appeared to be exactly closed. At length, after a very long time, I engaged the extremity of the catheter in the opening of the neck; immediately it was strongly drawn into the vesical cavity, as by a kind of suction. Having completely abandoned the catheter to itself, I saw it several times drawn in and repelled, by the alternate and sudden convulsive contractions of the muscles of the perineum and bladder; the urine was powerfully and promptly expelled; the extraction of the catheter was almost as painful and as difficult as its introduction, so strongly was it retained by the neck of the bladder.

All these circumstances having confirmed me in the idea that I had formed of the cause of the disease, I practised immediately cauterisation of the prostatic portion of the urethra. It only lasted during the time necessary for inclining the caustic to the right and left, making it run rapidly over the inferior surface of the canal.

The first day the patient suffered a good deal in urinating. The next day the pains were much less. The third day they had almost ceased. During these three days the urine was thick and muddy, and the last drops were accompanied by streaks of blood. Then it became transparent, and the patient retained it for a longer time.

Twelve days after the cauterisation, it was entirely natural, without deposit or cloud; the last drops flowed out as readily as the first and were as transparent; the patient no longer experienced tension or uneasiness in the perineum, nor involuntary contractions at the neck of the bladder; but when the stools were hard and copious, he still observed some thick drops at the end of the glans.

The first amelioration that we observed was in the sleep, which became more and more profound and prolonged; then in the physical and moral energy; and at length in the activity of the digestive organs. At the end of fifteen days the erections had returned. Some time afterwards there came on nocturnal pollutions, preceded by lascivious dreams and accompanied with vivid pleasure. The intellectual functions were the last in becoming completely re-established. It is true they never appeared strongly developed in this patient.

At the end of one month his health was perfectly re-established, and he desired to resume his service.

This patient is the first on whom I practised cauterisation for diurnal pollutions, so that his history contains a multitude of details upon the point that have now lost some of their importance: I have only preserved all those relative to the catheterism, because the spasmodic contraction of the canal in advance of the catheter, especially near the neck of the bladder, the manner in which it was retained there, and the movements that were impressed upon it by the convulsive contractions of the neighbouring muscles, may give an idea of the extreme sensibility of the urethral mucous membrane, and the influence that this disposition must exercise upon the vesiculæ seminales.

These phenomena are observed very frequently in patients affected with pollutions, a thing which is very readily understood. Their study is important then in many respects; thus, for example, I have remarked that the effects of cauterisation were the more certain, as the proofs of exalted sensibility were more marked: these are also the cases to which tonics, ice, cold baths, &c. are the least adapted.

The seminal losses were brought on by blennorrhagia, as in the preceding cases; but the excess of masturbation to which the patient had given himself, even before puberty, must have contributed much to this unhappy termination: so that the cure could not be obtained by the employment of the same simple means.

No. 13.

Intemperance—Menorrhagia—Nocturnal pollutions—Impotence—Very frequent emission of urine, &c.—Cauterisation—Cure in less than fifteen days.

J. D. gave himself up to excessive drinking at an early period, but little to masturbation; he had had but few connections with women; when at the age of twenty he contracted a blennorrhagia. It disappeared spontaneously at the end of three weeks: but a short time afterwards J. D. observed that he was subject to very frequent nocturnal pollutions; they returned sometimes for eight or ten nights in succession. On the day succeeding these losses, D. was dejected and enfeebled; he had headach, ringing in the ears, and dimness of sight, which made him resort to venesection three times, and to the application of leeches to the temples.

D. was drawn several times by his comrades to the public brothels, but nothing could determine the least erection; he was completely impotent.

Since the disappearance of the blennorrhagia, a yellowish discharge from the anus had made its appearance at several different periods, accompanied with a very annoying pruritus. A little later the patient had a herpetic eruption upon the face, for which he took a ptisan of soap-wort and bitter-sweet, as well as some mercurial pills. This herpetic affection was dissipated, but symp-

toms of irritation manifested themselves in the region of the bladder.

In 1834, D., aged 24, came to the hospital St. Eloi in the following condition: of middling size and well formed, skin white, hair black, face deeply coloured, air sombre and taciturn, desire for solitude, indifference for women, horror of masturbation; head constantly heavy, digestion difficult, limbs weak, emission of urine two or three times an hour during the day, and five or six times in the night, accompanied with burning and even pain in the canal.

The introduction of a silver catheter, of middling calibre, was accompanied by spasmodic contractions and acute pains in the neck of the bladder. These last circumstances determined me to propose cauterisation to the patient; he decided without any hesitation, and I practised it immediately.

I introduced the *porte caustique* into the bladder, so as to cauterise the neighbouring parts of the neck, and I ran over the surface of the prostate as well as the membranous portion in drawing out the instrument.

Immediately afterwards, pressing desire to urinate, emission of blood with urine. (Baths, ptisan of barley.)

The following night a painful pollution; emission of urine once only, but with acute burning.

The next day the patient urinated but four times, but always with burning and slight running of blood.

The third day more blood in the urine, but little scalding in urinating.

The fourth day emission of urine only at intervals of two or three hours, cessation of the discharge provoked by the cauterisation.

The succeeding days the emission of urine becomes more and more rare; the pollutions no more appear; the patient has resumed his gaiety, and converses with pleasure; his health is completely re-established.

Towards the fifteenth day he left the hospital.

In this patient the blennorrhagia had not been preceded by excess in coition or masturbation; but the abuse of alcoholic drinks is almost as injurious to the genito-urinary organs: besides, he was predisposed to an herpetic eruption, which manifested itself at a later period about the margin of the anus, and upon the face. It is especially in cases of this description that tonics, ice, cold baths, &c. fail, and are even injurious; fortunately cauterisation is then of great efficacy.

In this patient the eruption of the face having disappeared, there came on an inflammation of the vesical mucous membrane, more intense than in any of the preceding cases, since the patient urinated two or three times an hour; from that time the urinary symptoms became predominant; thus, catheterism was accompanied by acute pains in the prostatic region, and spasmodic contractions of the neck of the bladder.

It is not long since cauterisation of the prostatic portion of the urethra was looked upon as a deed of great rashness, so much was the introduction of the smallest quantity of nitrate of silver into the bladder feared. Although these fears were entirely founded upon theory, still they were so generally received, and appeared so natural, that I shared in them for several years: I have shown elsewhere in what manner I was led to rid myself of them, and with what success I had cauterised the mucous membrane of the bladder, in catarrhal affections of that organ.¹

Since then, when I meet with cases in which the bladder is implicated along with the prostatic mucous membrane, I commence the cauterisation with this cavity; and I continue it to near the bulb of the urethra, by drawing out the instrument and turning it rapidly to the right and left; it is then no longer for taking the length of the canal that I catheterise the patients, but to empty the bladder, in order that the action of the nitrate of silver may be more energetic.

We have just seen what has been the effect of this treatment; the patient, who urinated two or three times an hour, finally retained his urine as long as any person: at the same time his pollutions disappeared.

This case confirms then, in a remarkable manner, what I have said of the relations that exist between affections of the urinary passages and those of the spermatic organs.

No. 14.

Blennorrhagia—Abuse of copaiba—Jaundice—Chronic inflammation of the urinary and spermatic organs—Diurnal pollutions—Cauterisation—Prompt cure.

Brun, soldier of the 47th of the line, of a vigorous constitution, aged 23, contracted in the month of August, 1833, a blennorrhagia, of which he took no care during three weeks, and then entered the hospital to be cured of it.

At the end of a few days he was seized with an intermittent fever, and passed into the medical wards; the sulphate of quinine arrested promptly the attacks, and very soon afterwards, the patient, having concealed his running, obtained his discharge from the hospital.

Having then procured some balsam of copaiba, he took it in large doses for fifteen days. The running stopped, but there came on a jaundice and vivid irritation of the neck of the bladder, characterised by a frequent and irresistible desire to urinate, and by an acute pain in the perineum during the emission of urine.

The patient entered anew the ward of the fever patients, and was cured of his jaundice at the end of a month by an emollient and antiphlogistic treatment. Then, the chronic inflammation of the

¹ Vide *Leçons de Clinique, &c.*

urethra still persisting, he obtained leave to pass into the venereal wards.

After two venesections, three applications of leeches, and the administration of a very great number of baths, they gave him a hundred of Sedillot's pills. Under the influence of this last treatment, symptoms of diurnal pollutions manifested themselves, and the patient was sent to the surgical ward. This is the state in which I found him on the 13th of March, 1833.

Form good, muscles thick, bony system well developed, skin brown, hair black; notwithstanding this appearance of vigour, general lassitude, feeling of weakness and prostration, melancholy and dispirited air, forehead covered with pimples, habitual headache, torpor of the mental faculties, disgust of life, laborious digestions, accompanied by flatuosities, no erection for a long time, absence of all venereal desire, frequent emissions of urine, sixteen to twenty times a day, in a feeble, short, and embarrassed stream.

The passage of the urine causes an intense pain at the root of the penis, a kind of tickling along the canal, a slight swelling, like a half erection; the last drops are mingled with a thicker fluid; it becomes quickly decomposed, muddy, with an infectious odour, and deposits a copious sediment; the orifice of the urethra is very red, and is often the seat of a troublesome pruritus.

Half an hour after the patient goes to bed, he feels an itching in the canal, followed by an intolerable pain, which keeps him in a state of great anxiety, from which he can only rid himself by getting out of bed and walking briskly about his apartment.

A silver catheter, introduced into the canal, meets with no stricture, but excites spasmodic contractions and acute pains, especially as it approaches the bladder.

Cauterisation of the neck of the bladder and prostatic portion of the urethra, bloody urine rendered frequently and with pain. (A bath, ptisan of barley, milk, two soups.)

The next and the following days, diminution of the phenomena produced by the cauterisation and of the former symptoms.

At the end of twelve days the urine is transparent, the patient renders it only three or four times a day, and can resist a long time the contractions of the bladder; the appetite becomes imperious, and the digestion easy; the erections reappear, the face loses its wrinkles, and resumes its colour.

At the end of twenty days the emission of urine takes place only three or four times in twenty-four hours: this without pain, without tumefaction of the penis, in a full stream, and thrown out with vigour; the erections are energetic, digestion is perfect, the sleep is profound and refreshing.

Discharged the 6th of April.

I have met Brun several times since in the city; this cure had remained permanent, although the genital organs had resumed their functions; he finds himself in every respect as well as before his blennorrhagia.

The affection of the liver and the extension of the urethritis to the bladder and vesiculæ seminales, were brought on by the immoderate doses of copaiba that the patient indiscreetly administered to himself. It is certainly a powerful remedy against runnings from the urethra, but practitioners neglect too often to observe its influence upon the mucous membranes of the digestive and urinary organs. By administering it in too large doses, it produces a true inflammation instead of a tonic effect. By combating the urethritis with a suitable antiphlogistic treatment, the cessation of the discharge would be obtained much more surely and with much smaller doses.

The urinary passages were also as much affected in this patient as the spermatic organs, and in the same manner; cauterisation produced the same effect upon both, and the amendment followed the same course.

No. 15.

Benign discharge—Bad effect of copaiba—Tonic injections—Waters of Vichy, and especially of the cress juice—Diurnal pollutions—Impotence—Cauterisation—Prompt cure.

M. M., of a good constitution, having never committed excess of any kind, experiences in the month of May 1821, an indolent and slight discharge, after having passed a night with a woman that he thought healthy; administration of copaiba in large doses, injections with different preparations of cinchona: violent irritation, which is spontaneously dissipated after the cessation of this treatment; but embarrassment in the stream of urine, continuance of the discharge.

One year later, the patient being at Vichy, takes the waters as a matter of course: quartan fever that lasts till March 1823.

A short time after, administration of the juice of cress (cardamine), in larger and larger doses; from that time, rapid increase of all the symptoms, frequent emission of urine, with a feeble and embarrassed jet; discharge more and more bloody. These injurious effects of the cress juice were combated by an equally excessive use of cooling drinks, and severe regimen, that increased the weakness of the patient.

On his arrival at Montpellier, he had lost all venereal desire, and had had no erections for a long time; the jet of the urine is feeble and embarrassed; the last drops are mixed with gluey mucosities, that leave spots upon the linen.

The introduction of an ordinary silver catheter provoked spasmodic contractions in the canal and acute pains, particularly in the prostatic region.

An ordinary cauterisation, practised between the neck of the bladder and bulb of the urethra, produces a momentary increase of the symptoms, and induces very soon their rapid decrease and complete disappearance.

This case, as simple as possible, permits us to appreciate exactly the effect of the different remedies employed.

In the beginning, the discharge was of the most benign character, perhaps even it was only a non-contagious excitement, as the patient thinks; the copaiba in large doses and the tonic injections brought on an intense irritation, without diminishing the secretion: the use of the waters of Vichy was followed by a very obstinate intermittent fever: in fine, the juice of the cress exasperated the inflammation to the point of producing a bloody discharge. The baths, cooling drinks and strict diet, employed in an excessive manner, and long continued, prostrated the patient without destroying the irritation: hence the seminal losses and impotence.

It needed the direct action of the nitrate of silver upon the de-ranked mucous membrane, to modify essentially and in a durable manner its organisation and its vital properties.

No. 16.

Four blennorrhagiæ—Diurnal pollutions—Cauterisation—Cure.

I find among my cases, the following note of a student who has described with remarkable care and clearness the phenomena that he observed upon himself.

The patient has had several gonorrhœas: the first was treated with but little care, which rendered the cure long and difficult. He reckons four discharges of the same nature; but he cannot affirm that they were not the consequence of the first, or of a predisposition to this kind of disease.

In the month of March, 1824, first appearance of a white discharge, quite consistent, analogous to semen, running from the canal during the efforts of defecation. The patient does not recollect whether, in the beginning, this evacuation was accompanied by voluptuous sensations, but he has felt nothing of the kind for a long time; it takes place always at the end of difficult stools. There is scarcely any when the fecal matters are soft and rendered with facility.

The patient perceived, that after every stool which caused a laborious and copious evacuation, he was seized with a general weakness and total prostration of the economy. By taking suitable precautions to moderate the expulsive force of the urine, he saw the first drops bringing away with them a whitish, glairy-like matter, that destroyed their transparency. After their emission, he experiences a state of uneasiness and weakness in the region of the bladder. The urine, when cold, ordinarily holds in suspension a white, opaque, and quite abundant matter.

The canal of the urethra is extraordinarily susceptible: the meatus is almost always red, inflamed, and moist; the fluid that collects at its opening is whitish: the emission of the urine is accompanied by irritation of the urethral membrane, burning and slight pains: in the interval, the patient experiences there itchings, ticklings

almost voluptuous, sometimes even acute titillations and darting pains, similar to the pricking of pins: this takes place especially when he changes his position or presses upon the penis.

The patient has remarked, also, that his shirts are slightly spotted with a yellowish, thick matter: sometimes he experiences disagreeable sensations in the rectum, shootings like that of an electric shock.

Since the appearance of this seminal loss, the sensibility of the patient has become considerably exalted; during defecation, he is seized with chills that run over the whole body. This great susceptibility of the nervous system manifests itself in an especial manner at the time of any great emotion, by whatever cause excited.

The moral feelings are not less affected than the physical. The patient is continually sombre and melancholy. Great disorder exists in all his ideas: what formerly was the source of the strongest emotions, at the present time produces no impression upon him; and the smallest matter often became the cause of the greatest annoyance.

The organs of generation have lost all their energy. The excessive debility that has fastened upon them, only admits of incomplete erections of short duration, even under circumstances the most likely to excite them.

Such are the circumstances that my memory recalls, &c.

I have not been able to find the remainder of this case, and I have not a sufficiently distinct recollection of what succeeded, to finish it from memory; I only know, that after being cauterised, M. B. left Montpellier very soon in a satisfactory condition. As I have never heard from him, I suppose that his cure was confirmed. These patients are incredibly tenacious: it is probable that this one would have demanded additional advice if his health had not been promptly re-established.

Besides, it is principally for the symptoms that I have reported this case: it is rare to find patients who observe themselves with so much care, and express themselves with so much precision.

No. 17.

Bleorrhagiæ—Diurnal pollutions unnoticed—Grave nervous symptoms of an hysterical appearance—Cauterization—Prompt cure.

At the commencement of June, 1827, I received from a merchant of Bilbao, a letter that I translate literally.

“The principal inconvenience that I experience, consists in a great difficulty of going to sleep: when I go to bed, a kind of revolution takes place in my whole body; vapours mount into my head and sometimes to the throat, as if I was going to suffocate; this only lasts a moment; then a violent palpitation seizes me, but it only lasts a short time. At other times, I first feel a burning heat in the stomach, and then the vapour mounts to the head, throat or

heart. If I take any supper, I am much more incommoded during the night, and I feel then a kind of dragging in the stomach, a very irregular palpitation, as if respiration was going to stop. All this takes place every night more or less strongly, and the next day I am more fatigued than when I went to bed.

"I feel also constant pains in the shoulders, at the top of the kidneys, in the loins, and in the whole body: these pains are not very acute, but are very annoying. Every morning I feel also chills in the shoulders, followed by heat. I have a very costly habit, for nothing passes me except with great difficulty, and not every day. I experience very often a great burning in the face: an interior impatience consumes me, as if I had mercury in all parts of the body. Severe pains disturb my mind, especially when I have eaten more than usual. I have remarked that wine was my greatest enemy; every time I have taken it I have been worse.

"The physicians attribute my disease to the piles, because for two years and a half I have had no discharge of blood per anum; they have sent me to Bagnères de Bigorre, to drink the waters of Lasserre, and take the baths of Salut; but I do not wish to proceed further without your advice."

"Receive, &c.

N.

"It will not be useless perhaps to remark, that I took every morning, at Brussels, for a month, the corrosive sublimate, and afterwards copaiba in great quantities.

"BILBAO, June 3d, 1827."

This is my reply to M. N.

"The account I have just received is very incomplete; yet from the symptoms described by the patient, I think I am able to assert, that he experiences losses of semen on going to stool, and during the emission of urine; I am still more confirmed in this opinion by the postscript of his letter, relative to the treatment pursued at Brussels.

"However, as it is important, before all, to prove exactly the existence or absence of these seminal losses, I urge M. N. to take the following precautions in urinating or going to stool: I desire him to reply afterwards to the questions I am going to address him."

Here follow very detailed instructions that it is useless to transcribe.

Twelve days afterwards, M. N. was at Montpellier. It needed but little attention on his part, to prove the correctness of my diagnosis, and he was so much struck by it, that he left immediately, to place himself under my care.

He confirmed me in the opinion that I had formed from the treatment indicated in the postscript of his letter. The change in his health had, in fact, commenced at the termination of a blennorrhagia contracted in Belgium, and treated with sublimate, and then with large doses of copaiba: which did not prevent the discharge

from being very often reproduced by the slightest cause. His urine was often thick, muddy, very fetid, &c.

Some days after his arrival, I practised an ordinary cauterisation upon him, at the prostatic portion of the urethra, where the catheter caused acute pain.

At the end of eight days the diurnal pollutions had disappeared : at the end of fifteen, sleep had returned ; the nervous symptoms had ceased, and digestion was easy.

I advised M. N., however, to stop at the waters of Saint Sauveur on his return home, and to take about twenty baths to confirm his cure ; I have had the satisfaction to learn that his health was completely re-established.

What is most remarkable in the symptoms experienced by this patient, is their hysterical character ; however, on examining them attentively, we find all the phenomena mentioned in the preceding cases ; it was, indeed, by them that I divined the true cause of the disease, although the exposition of them was made in a very incomplete manner.

From the small number of facts that I have reported, it is already easy to see that all the organs of the economy suffer, each in its own way, from the debility produced by seminal losses ; that all are susceptible of becoming the seat of sudden congestions that increase momentarily the habitual derangement of their functions ; but, according to the original idiosyncrasy of each individual, such or such organ is more strongly influenced, which causes certain symptoms to predominate, and prevents us from observing others, although they really exist.

Thus M. N. felt often a great burning in the face ; very great pains of the head, that troubled his mind ; feelings of impatience, wandering pains, &c. He was habitually constipated, his digestion was laborious, and disordered all the other functions ; but the respiration and circulation were especially deranged, and this predominance gave an appearance to the disease altogether peculiar.

Nevertheless, the efficacy of the cauterisation can leave no doubt as to the true cause of all these symptoms.

No. 18.

Repeated blennorrhagæ—Swelling of the prostate—Difficulty in urinating
—Impotence—Hypochondriasis—Cauterisation—Prompt cure.

M. M., a Spaniard, contracted, in 1798, a blennorrhagia that was treated with copaiba, astringent injections, &c., and was not completely cured until the end of some years.

In 1819, he had a slight discharge that was spontaneously dissipated. In 1822 a urethro-prostatic inflammation supervened after different excesses, and was followed by suppuration of the prostate. In 1824 there was still flowing from the canal a very great quantity of greenish pus, thick, and streaked with blood.

The urine was habitually passed with difficulty in a small and bifurcated stream; it excited acute pain, that was felt behind the pubis, and brought on an irresistible desire to go to stool.

From the commencement of this last disease, all erections and venereal desires had disappeared. The patient fell into profound melancholy, and lost his appetite.

For three months antiphlogistic treatment, strict regimen, pill of digitalis and copaiba: suppression of the discharge and pains; greater facility in the emission of the urine; but little change in the genital functions, or in the mental state of the patient.

Easy introduction of a small bougie of catgut, and afterward of a gum elastic catheter; in one of these attempts at catheterism, the extremity of the stilet escapes from one of the eyes of the catheter and wounds the prostate. Vivid inflammation; attack of fever excited at every attempt to pass the catheter; antiphlogistic and emollient treatment. Evident amelioration.

The patient came to Montpellier in the following state:

No discharge; the pains and tenesmus, provoked by the passage of the urine, take place but seldom; the difficulty in urinating has much diminished; the stream is larger; the urine is less troubled and deposits less mucosity; the passage is free; but the prostate is engorged; the genital organs are rendered completely impotent. The patient is feeble, melancholy, sombre, hypochondriac, without appetite, and digestion bad.

Cauterisation from the neck of the bladder to the bulb of the urethra.

Cessation of the local symptoms; return of the erections; rapid amelioration in the moral and physical state of the patient; prompt cure.

I have not found any other documents relative to this case than the physician's letter, and the notes that I added after the departure of the patient. Not wishing to trust to my memory for its development, I have been content to translate the one and transcribe the other; but I am thoroughly convinced that seminal losses must have existed, although no mention is made of them in the text.

In fact, the repeated discharges, the swelling of the prostate, the state of the urine, the phenomena induced by its emission, the complete impotence of the genital organs, the weakness, hypochondriasis, and, on the other hand, the return of the erections after cauterisation, all make me think that this patient was exactly in the same state with those whose seminal losses have been carefully described.

No. 19.

Masturbation—Excess of coition—Seven blennorrhagæ, &c.—Chronic cystitis—Diurnal pollutions resembling a chronic gastritis, &c.—Cauterisation of the bladder and prostatic portion of the canal—Prompt cure.

M. H., shoemaker, aged 29, came to consult me for a chronic gastritis that had resisted all treatment for eight months. His countenance was livid and thin, his voice feeble and small; his air timid, embarrassed as if begging. He experienced acute pains in the epigastrium, colics, &c., but his tongue was pale; I ascertained very soon that all his symptoms were owing to diurnal pollutions, whose existence had been entirely overlooked.

M. H., of a nervous temperament, had contracted, at the age of eleven years, the fatal habit of onanism, and did not entirely renounce it until within two years. From the age of twelve to fifteen he practised it five or six times a day, and his frenzy was even carried so far, that he abandoned himself to it often on leaving the arms of his mistress.

At 15, blennorrhagia accompanied with chancres, and very soon after an herpetic eruption on the left leg, and a suppuration quite abundant from the ear of the same side. Treatment with the muriate of gold; disappearance of the syphilitic symptoms; continuance of the urethral discharge during fifteen months.

At 17, new blennorrhagia, new chancres; pustules of the anus: new treatment with the muriate of gold. Cure at the end of four months.

At 18, third blennorrhagia without complication. From 23 to 25 three other discharges of the same nature.

At 26, seventh blennorrhagia, so violent that it occasions a complete retention of the urine.

At 27 M. H. was married, and gave himself up to coition three or four times a day. From this epoch the venereal desires became less urgent; erection of the penis took place with less facility, the semen escaped before it was complete, and sometimes even during the night, the patient being unconscious of it; sleep, far from repairing his strength, appeared to diminish it; in the morning he left his bed with great unwillingness, with yawnings, pandiculations, and weakness of the lower extremities.

Although his appetite was sufficiently good, his digestion was badly performed, was slow, and generated great quantities of gas: the aliments thrown off at stool were but little changed, and very fetid. The desire to urinate was very often renewed in an urgent and irresistible manner: the evacuation of the bladder took place with a feeble, short, and embarrassed stream. The urine passed each time in small quantities, caused a disagreeable burning in the canal: it was of a brick red, deposited very soon a thick and muddy sediment, became very rapidly decomposed, and assumed an odour of rotten flesh.

His face, formerly florid, became pale: his habitual gaiety was replaced by a profound melancholy. Indolence and negligence succeeded to activity and a desire for employment.

Alarmed at these changes, the patient consulted a physician, who thought he recognised a chronic gastritis, and prescribed leeches to the epigastrium, antimonial ointment, a mild milk diet, and abstinence from coition. Under the influence of this treatment, the gastric symptoms experienced some amendment; but the patient complained of pains in the chest. (Blister to the arm, flannel upon the skin).

The pains abandoned the chest and attacked the liver. (Frictions with the antimonial ointment, slight purgatives). Improvement in regard to the liver; but increase of the pain in the epigastric and lumbar regions: obstinate constipation: extreme heaviness of the limbs: lassitude and shortness of breath brought on by the least exertion: disgust of life; indifference to his own interest and person; negligence and slovenliness; desire for change of place and movement; projects for traveling. No coition for eight months.

Having satisfactorily ascertained the existence of seminal losses, during the stools and at the end of the emission of urine, the absence of any lesion of the chest or abdomen, I proposed cauterisation to the patient; after some explanations, he decided to submit to it.

The introduction of a silver catheter, of medium calibre, provoked spasmodic contractions the whole length of the canal, and acute pains, especially after passing the bulb.

After having emptied the bladder, I cauterised the part nearest the neck, then the surface of the prostate and the membranous portion of the canal.

During the day, frequent and painful emission of urine tinged with blood. (Bath, injections, barley water.)

The following days, feelings of strength and activity, strong appetite, profound, invigorating sleep, cessation of the constipation, return of the erections, urine more and more clear, voice evidently deeper and stronger, slight colour in the face, expression of gaiety, more confident air.

The thirteenth day, M. H., tormented by frequent and energetic erections, yielded to the temptation, and resumed his conjugal functions suspended for eight months. This premature act of emancipation had not, however, any unhappy result, and convalescence followed its ordinary course.

M. H. is at the present day in a new world; all that surrounds him produces impressions of pleasure; it is sufficient simply to see his countenance in order to appreciate the change that has taken place in him; it is the expression of the most lively happiness substituted for that of the most sombre melancholy.

It is evident that the deplorable excesses in masturbation and coition to which the patient abandoned himself, have not had less

influence in producing the diurnal pollutions than the seven blennorrhagiæ contracted in so short a space of time; they must then be taken into consideration; but it is well to remark, also, that individuals who give themselves up to such excesses, must be prompted to them from a great energy of the genital organs, an energy which renders these excesses less injurious.

Notwithstanding all the causes of disease that have acted upon the constitution of this patient, and the gravity of the local and general symptoms, the cure was very prompt, which I attribute to this primitive vigour of the organs affected. These privileged organisations present, in fact, very great resources, if they are ever so little assisted.

In this case all believed in the existence of gastritis, of hepatitis, in a disposition to pulmonary phthisis, &c., and did not once fear a cerebral affection. Yet the symptoms experienced by this patient differed little from those which in other cases had caused the belief in disease of the brain or its envelopes; but this man exercised his limbs more than his head; we could only observe in him laziness, negligence, and awkwardness, because his memory, his imagination, &c., were not much developed. In order to appreciate exactly the influence of seminal losses upon all the functions, it is necessary to take into consideration, not only the original or acquired predominance of the different organs, but also the habitual occupations and social position of the patients.

One of the sisters of M. H. is affected with very copious leucorrhœa, and, what is remarkable, she experiences symptoms very analogous to those of her brother. The face presents the same appearance. Her digestive functions are deranged in the same manner; weakness, insomnia, &c., exist to the same degree.

This coincidence appeared to me sufficiently remarkable to be noticed *en passant*.

No. 20.

Masturbation—Blennorrhagia—Various anti-venereal treatments—Diurnal pollutions—Progressive debility, especially of the brain—Frightful emaciation—At the end of sixteen years cauterisation—Cure—Venereal excesses—Relapse—Second cauterisation—Same success.

M. V., born at Tortose, in Catalonia, of a spare habit, and nervous temperament, given to masturbation about the epoch of puberty, abstained from it when he found his health becoming affected; he gave himself up to it anew when his strength began to be re-established, and did not renounce it until he saw his life in danger. He regained his health again, and entered with ardour and success into the study of law.

At 18, he contracted a blennorrhagia, that was treated at Saragosa for six months, with injections of acetate of lead, sulphate of copper, &c.; it disappeared; in consequence of a journey on horse-

back, returned very soon after; ceased again; and at a later period was reproduced with the greatest facility.

Independently of the tonics, injections, and astringents that were prescribed to the patient without discretion, they made use of sublimate, mercurial pills, frictions and sarsaparilla. His health became more and more deranged; he became subject to headaches, pains in all the limbs and loins, accompanied with weakness, insomnia, frequent syncopes, &c.

M. V. attributed all these symptoms to the existence of the venereal virus; and as they increased several times after coition, he became convinced that he had become newly infected. At length attention to his health became a kind of monomania. He abandoned the career he had been pursuing for eight years, and came to Montpellier to study medicine, with the sole object of ascertaining the first cause of all his troubles, and of finding a cure for them. But recurring always to the idea that they depended upon a venereal virus, he submitted successively to all the anti-syphilitic treatments that he found indicated in authors, and combined them in different manners.

Yet his health declined more and more; his digestion became difficult and laborious; he was tormented with gases and an obstinate constipation, that he combated by frequent purgatives. His mind became weakened to such a degree that his attention could not be fixed by any book; indeed he was very soon incapable of reading.

He attended the course of the faculty, but he could not hear the half of a lecture without becoming fatigued and impatient; the blood rushed to his head, and very soon he felt a desire for a change of place and for walking.

Passionately occupied in former times with the most abstract ideas, he could not follow the simplest reasoning; and forgot the most recent and important facts. He was tormented with vertigo, dimness of sight, and ringing in the ears. The slightest effort of the mind caused flushes of heat in the head; these light, momentary congestions were also very often produced by the labour of digestion, flatulency, and by the efforts of defecation.

The patient having his mind constantly occupied with these symptoms, eventually became persuaded that *the cerebral substance had been absorbed*, and that his cranium contained only *the nervous cords destined to the functions of the senses*; he thought he could feel them *bathed in serosity*; he was no less obstinately haunted with the idea that he was menaced with an attack of apoplexy.

On the other hand his character became sombre, peevish, and unsociable: he became averse to music, which he had loved passionately; he renounced all his relations; and his misanthropy became so unnatural, that he turned back when he met a friend in the street, in order not to be obliged to speak to him. Tormented with an irresistible inclination for movement, he could remain but a short time in the same place; and this desire for walking

and love of solitude, made him constantly wander into all the paths in the environs of Montpellier. Indifferent to every thing, he was often in distress from having neglected to provide for the morrow.

At length, after seven years' residence at Montpellier, M. V. came to consult me. I was convinced that he was tormented with diurnal pollutions, and all my questions were directed with this view; but he had never remarked any seminal loss in urinating, or in going to stool, and he persisted in the opinion that all his troubles arose from the venereal virus.

A short time after, in consequence of a cerebral congestion, he applied some leeches to the anus, and was not able to leave his bed for three months.

The observations that he had made upon himself during this time had proved to him that I was not deceived, but he still wished to prescribe for himself; among other means he had thought of inclosing camphor between the prepuce and gland, in order to act more directly upon the genital organs; but a few hours afterwards, having risen to go to stool, he passed the hollow of his hand full of semen; he lost his senses, and remained a long time unable to call for assistance.

I have never seen a more disgusting spectacle than that which struck me on my arrival at his bedside; the disorder and filthiness that surrounded him announced the greatest degree of negligence; muddy urine of an infectious odour filled a greasy vessel placed near his bolster, upon a chair covered with dust and garments. The patient, excessively emaciated and pale, was tossing about upon his bed like a dying person just come out from a deep syncope; his limbs were icy cold, his pulsations feeble and irregular.

As soon as he was in a state to understand me, I proposed to him cauterisation of the prostatic portion of the urethra. He hastened to accept it, and I practised it the same day.

The silver catheter of medium calibre, that I introduced previously, in order to empty the bladder, determined spasmodic contractions of the canal, and appeared to cause violent pains, especially towards the prostatic portion; which confirmed me in the idea that this part of the urethra had been for a long time the seat of a chronic inflammation.

The cauterisation presented nothing remarkable.

Two days afterwards, the patient experienced a sensation of strength in the genital organs, and a general improvement that gave him some hope. Very soon there was a return of gaiety, appetite, and sleep; his voice acquired more strength; he felt a renewal of his passion for music; and sought again the society of his friends: his countenance changed completely its expression; his joy became expansive and even noisy.

At the end of fifteen days he experienced some venereal desires that gave a new course to his ideas; his erections were frequent, energetic, sometimes even troublesome. His appetite returned, and digestion was performed with unusual energy.

The convalescence was continuing to make some progress, when M. V., in order to accelerate it, introduced into the canal an instrument containing acetate of lead and copaiba; from that moment the pollutions reappeared; the inflammation extended to the testicles, in the left of which suppuration took place in spite of the employment of leeches, cataplasms, &c. a puncture gave issue to an ounce of pus, which appeared to me to flow from the tunica vaginalis: after this evacuation all these accidents were gradually removed, and he again became convalescent.

One month later, all the functions were performed with a regularity that M. V. had not enjoyed for twenty years. As he had a good deal of natural talent, he recounted in the most piquant manner the sensation that he had experienced, the opinions that he had formed upon his disease, and especially the motives of his most singular actions.

Yet at the end of two months, I saw him reappearing as melancholy as at my first interview with him. He informed me that, tormented by frequent erections, he had taken a mistress, with whom he had consulted more his desire and pride than his strength. This new regimen, which would not have been any thing extraordinary for another, sufficed to bring on, at the end of fifteen days, his former irritation of the genital organs, and the accidents that had resulted from it.

M. V. hastened then to break this liaison, but his health did not become re-established, because the diurnal pollutions had reappeared.

I practised a second cauterisation similar to the first: it had the same result: but this time M. V., warned by this relapse, was more moderate in his conduct, and returned home.

This case must have resembled those of the first two patients of whom I have reported the post mortem examinations (Nos. 1 and 2;) the symptoms were almost as grave; they presented the same characters; they gave rise to the same illusions as to the state of the brain.

The prompt re-establishment of the intellectual functions of M. V. proves that there was no more cerebral disorganisation, than in the two other patients: the effects of cauterisation are as peremptory as a post-mortem examination. However, it is probable that the genital organs were not so seriously diseased.

The obstinacy with which M. V. combated the venereal virus is remarkable as being peculiar to the character of the Spanish people; but we have already seen M. N. (No. 10) fall into the same error, and that too without ever having had any syphilitic symptoms, either primary or secondary.

These prejudices are very common with patients, and physicians too often participate in them eventually. Sensations painful, vague, contusive, and deep seated, are those which are especially mistaken for pains in the bones.

This case is well fitted to show how difficult it is for patients to discover the seminal losses they experience in urinating or in going to stool. M. V. had but one thought, and that was to search out the first cause of all his trouble: he sacrificed every thing to this ardent desire; it was for this purpose alone that he came to Montpellier, to study medicine; and he was upon the right path, since he was always thinking of the blennorrhagia that had preceded the change in his health; yet after fifteen years of daily observations upon himself, after seven years of medical studies, he had never once suspected the existence of these diurnal pollutions: indeed, it was only with great difficulty, that he at length decided to attend to them.

Let us judge from this of the number of hypochondriacs who must be in the same condition!

No. 21.

Two blennorrhagie—Bubo—Inflammation extended in the direction of the testicles and kidneys—Diurnal pollutions—Cauterisation—Cessation of the pollutions—Relapse—Second cauterization—Same result.

I am indebted to the kindness of M. Willeaume, surgeon in chief of the military hospital of instruction of Metz, for the following notes of a case analogous to the preceding.

“M. B., officer, aged thirty-one, robust, of a mixed temperament, contracts in 1823 an urethritis that lasts two years, and is then suppressed by injections.

In 1825, urine depositing a whitish sediment. Three months after, uneasiness in the region of the bladder. The disease is treated as a vesical catarrh.

In 1826, daily and reiterated converse with a mistress; at the end of some time, intense urethritis, although this woman appeared healthy. Bubo terminating in resolution. Treatment with mercurial frictions that we were obliged to suspend on account of the swelling of the gums and the great excitability of the subject: soon after, great irritation of the urethra, bladder, and kidneys, in which the stomach sympathised. Diurnal pollutions that return at first every five or six days, then at each stool, and even in urinating. In fine, the irritation extends in the direction of the testicles; the semen is tinged with blood, then grayish, puriform.

The first of June, cauterisation of the prostatic portion of the urethra. The irritation of the canal and the pollutions cease for one month: they return in the month of July, with the trouble that ordinarily follows in their train; discouragement, bad digestion, weakness, &c.

New cauterisation. Later, bougies passed from time to time into the urethra, which is contracted. Wandering irritation, readily changing from the pelvis to the chest; but yielding as readily to baths, emollient applications, and demi-injections slightly narcotized.

The 10th of September, M. D. leaves the hospital in a quite satisfactory condition, without pollutions. WILLEAUME.”

The remarkable precision of this laconic history permits us to follow perfectly the progress of the disease in the direction of the kidneys and testicles. The first urethritis was followed by a whitish sediment in the urine and by uneasiness in the region of the bladder. The second extended its influence from the bladder to the kidneys: at the same time diurnal pollutions manifested themselves, and the semen passed was tinged with blood, then puriform. Thus, the kidneys and testicles, the bladder and vesiculæ seminales, are found exactly in the same condition.

Twice, the effects of the cauterisation have been remarkable for their promptitude. It is true the patient had a relapse at the end of a month; but we must ascertain to what cause it ought to be attributed. The preceding case shows how disposed patients are to yield to the first venereal desires, and we can conceive that the least imprudence of this kind must be followed by results as injurious as an indigestion in a case of convalescence from gastritis.

We shall see that excesses at table, a ride on horseback, or a prolonged exposure to cold, are sometimes sufficient to induce relapses more or less grave. But can any method of treatment be held responsible for the conduct of the patient? If the same curative means produce the same effects the second time, is this not an additional reason for believing in their efficacy?

No. 22.

Blennorrhagia, followed by excoriations of the gland and diurnal pollutions—Cauterisation without success—Artificial sulphurous baths—Cure.

M. B., lieutenant of voltigeurs, affected with varicocele, contracted in 1818 a blennorrhagia: emollient ptisans and warm baths reduced it at the end of a month to a slight oozing, that ceased at a later period entirely, after the appearance of excoriations about the urinary meatus. This kind of herpes of the glans yielded at the end of twenty days to cold lotions; returned four months afterwards; disappeared by the same means, and since then manifested itself periodically every three or four months, without being influenced by the most energetic anti-venereal treatment. Every time, its return was preceded by perineal and testicular pains, which the excretion of the fecal matters very much exasperated.

At the end of five years, these excoriations ceased, and the pains, formerly calmed by their appearance, became permanent, and were accompanied with seminal losses during defecation. The patient experienced pains in the regions of the kidneys that became insupportable after remaining stationary a few moments under arms. The urine deposited a whitish sediment.

Sea bathing increased momentarily the pains of the perineum, and the difficulty in passing urine. Baths of fresh water exasperated the pains in the kidneys. His digestion became disturbed.

When the patient came to consult me, I at first thought there was a stricture. I endeavoured several times to explore the canal with

a *porte empreinte* ; but every time it was arrested at different depths, and came out with a peculiar form. After some days' repose, I introduced into the bladder an ordinary catheter without meeting any permanent obstacle, but not without causing acute pain, especially after passing the bulb of the urethra. This patient, then, was only afflicted with an excessive sensibility of the mucous membrane of the urethra. I hoped to put an end to it by cauterisation, as I had often done before ; but this time, the means was absolutely without effect.

Recollecting then the excoriations of the glans, whose disappearance had been followed by the increase and continuance of the difficulties, I prescribed artificial sulphurous baths, with two ounces of the sulphuret of potash. The first produced immediately the best effect ; the others caused an intense irritation of the stomach, and the return of all the difficulties. I learned very soon that there had been added to the last baths a certain quantity of sulphuric acid ; I suppressed it, and as soon as the patient had resumed the use of the baths, with the sulphuret of potash alone, his health improved anew in a rapid manner.

At the end of one month, the pains had disappeared, the urine was transparent, and the emission of fecal matters was no longer accompanied with seminal losses. Digestion was re-established without delay, and the patient very soon regained his strength and embonpoint.

Before his blennorrhagia, M. B. had never had any herpetic eruption ; from that epoch a periodical excoriation manifested itself about the glans : it might be thought that it was owing to a syphilitic affection, but it resisted the most energetic anti-venereal treatment. When it made its appearance, the pains in the perineum and testicles ceased ; but as soon as it disappeared, these symptoms returned ; diurnal pollutions came on with them ; it was probable that cauterisation would modify the susceptibility of the mucous membrane of the urethra ; it did not, however, produce any apparent amendment.

Artificial sulphurous baths were given with advantage as long as nothing entered into them but sulphuret of potash : sulphuric acid was added to them, as is often done with the intention of increasing their activity ; from that moment, all the difficulties re-appeared ; we returned to the sulphuret of potash alone, and the cure resumed its course without interruption.

It is remarkable, also, that ordinary baths constantly increased the pains in the kidneys, whilst sea-bathing always aggravated those of the perineum.

Anomalies of this nature abound in the treatment of pollutions : it often requires much investigation to appreciate them, but particular facts will put practitioners in the way of doing it, by furnishing them with analogies.

No. 23.

Two blennorrhagiæ—Diurnal pollutions, &c.—Cauterisation—Hydro-sulphurous baths—Cure.

In 1813, Capt. R. contracted an intense blennorrhagia; peculiar circumstances forced him to neglect it entirely: it was, however, at length cured.

In 1816, he had a second discharge that was at first very slightly treated, but yielded at a later period to the use of copaiba.

From the time of this second infection, Capt. R. broke off all intercourse with suspicious women; but the least excess, or the slightest excitement, induced often the return of abundant and prolonged gleets.

The spermatic organs at length sympathised with these repeated inflammations of the urethra; diurnal pollutions were the consequence of them, and the whole economy very soon felt their influence. The following is what the patient wrote to me on this subject: I transcribe his own expressions.

“For two or three years my health has been extraordinarily changed; and obstinate constipation incessantly torments me; the efforts that it requires determine considerable evacuations from the canal: I have lost my appetite, my mouth is foul, I digest poorly; I am always full of wind, which twists my entrails, and causes a continual uneasiness, an insupportable restlessness. I do not sleep by night, and during the day I am in a constant state of drowsiness. My head is heavy, I cannot occupy myself about any thing; I am as it were imbecile, incapable of the least reflection.”

The exploration of the canal caused acute pains and spasmodic contractions, especially when the catheter approached the prostatic region.

I practised a slight cauterisation from the neck of the bladder to the bulb of the urethra.

Some days after, an evident improvement was remarked in all the functions: some sulphurous baths administered at a later period confirmed the cure.

No. 24.

Lymphatic temperament—Masturbation—Dartres—Violent and prolonged blennorrhagia—Pollutions—Vesical irritation—Hemorrhoids, &c.—Cauterisation—Rapid improvement—Hydro-sulphurous baths—Cure.

During his youth, M. N. was subjected to a diet most generally of vegetables, to sedentary, assiduous labour, and to prolonged watches, under the influence of a cold and moist climate: thus the lymphatic system acquired in him a high degree of development.

From his sixteenth year, he gave himself up to excessive masturbation; one year afterwards, his constitution, naturally feeble, became very much deranged; frequent nocturnal pollutions, great weakness, especially of the loins, and painful digestion with acidity,

were the first symptoms that manifested themselves. At a later period, pityriasis showed itself every winter upon the face, and disappeared in the spring.

At 19, M. N. had a blennorrhagia, the violence of which was excessive, for a person of his weak constitution; it was attended with acute pains in the loins, and at the neck of the bladder; with an intense fever that lasted four days. At the end of three months, the discharge stopped; but the derangement of the digestion had continued to increase. His repasts were followed by vertigo and drowsiness. There supervened an obstinate constipation, and the urine was often troubled and lactescent.

Six years elapsed without any remarkable change. At the end of this time, the dartre reappeared about the nose; it was combated by antiphlogistics that increased the weakness, favoured the flatulency and disposition to constipation.

Later, hemorrhoids came on, accompanied with a yellowish oozing from the anus, and with symptoms of irritation in the region of the bladder. Sitting caused spasmodic contractions in the perineum. Ascending douches at first relieved the constipation; but they finally brought on a diarrhœa that was followed by a still more obstinate constipation.

Then came on continual and insupportable ticklings in the canal; acute pains during the emission of urine, frequent spasmodic contractions of the bladder, and an extraordinary sensibility in the hypogastrium.

A copious hemorrhoidal flux brought on a momentary amendment; but a short time after, emaciation was carried to such an extreme that the patient was forced to support the abdomen with a belt. It was in this condition that he arrived at Montpellier. He thus terminates a long memoir, from which I have made the preceding abstract:

"I am weak and my gait is unsteady; am very susceptible to cold and but little affected by heat; my skin is dry; my memory is fugitive; my extremities are of an icy coldness; my scrotum pendant; my testicles soft and sensitive; the semen that they secrete is clear and watery; pollutions are more rare, but always accompanied with a wearisome sensation in the head. For two months past, my urine is thicker, and especially within a few days, as the weather is cold and moist; it is muddy, full of filaments, sometimes accompanied with a cloud floating on the surface or suspended in the fluid. The spasms of the bladder are less frequent; but sometimes, in urinating, I experience a burning, at other times a tickling at the commencement of the canal of the urethra. When the urine or semen is passing, this sensation is felt at the orifice of the glans. I ought to add, that all my mucous membranes are very susceptible to disease; that all the irritations of which they have been the seat have always become chronic, &c."

I find at the bottom of this long memoir the following note added by myself: Cauterisation of the prostatic portion of the canal:

notable diminution of all the symptoms: cure terminated by the use, during two months, of the waters of *Bagnères de Luchon*.

The hydro-sulphurous waters probably contributed as much to the cure as the cauterisation. They are especially indicated whenever there exists a cutaneous affection and great susceptibility of the mucous membranes; but when the irritation of the genital organs is too intense, they cannot be supported: the cauterisation, when it is not sufficient to cure, has at least the advantage of subduing this excess of sensibility.

No. 25.

Nervous temperament—Masturbation—Two blennorrhagiæ—Nocturnal pollutions—Gastritis—Stricture—Five cauterisations—Cessation of the pollutions—Relapse—Injurious results from sea bathing—Advantageous effects from cauterisation and hydro-sulphurous baths.

M. Felix R., of a spare habit and nervous temperament, given at an early period to masturbation, contracted afterwards two blennorrhagiæ, that he entirely neglected. A short time after the last, he remarked that coition was followed, even in the night, by a spontaneous seminal loss; that he experienced itchings of the anus, prickings at the extremity of the gland, and a burning heat in the urethra after the emission of urine.

The nocturnal pollutions disappeared after a journey and a complete change of habits, but the other symptoms remained.

In 1829, M. R. fell desperately in love, had frequent and prolonged erections, in consequence of which the pollutions returned two or three times every night. His digestive functions soon became deranged; some mental troubles supervening a short time after, developed an acute gastritis that required a strict diet.

Weakness and emaciation made rapid progress; constipation became obstinate; the itchings of the anus assumed a painful character; they were accompanied with darting pains that extended to the perineum and bladder: an insupportable heat was experienced along the whole length of the canal; the desire to urinate became more frequent and more imperious; the stream of urine was bifurcated and twisted spirally.

In 1831, M. Velpeau having ascertained the existence of a stricture in the canal, destroyed it by five cauterisations. For several months the pollutions appeared only at intervals of from twelve to twenty days, and this in consequence of a long jaunt on horseback or on foot: but these repeated instances of imprudence eventually rendered them more and more frequent.

During the use of salt water baths, the seminal losses became less frequent by night; but they showed themselves at the end of the emission of urine and during defecation, with a constantly increasing quantity. The itchings of the anus became redoubled, and the pains of the canal and bladder extended to the testicles.

The application of a moxa to the perineum relieved these pains, but did not stop the seminal losses.

In June, 1823, M. R. came to consult me, and put into my hands a long memoir, from which I have made the preceding extracts: this is the termination of it:

“Almost daily, on going to stool, the seminal losses occur, and are sometimes very abundant. Emaciation increases every day; my head is weak, and my nervous system very susceptible. The gastritis appears to be intimately allied to these seminal losses; for when they are the most abundant, the gastritis is exasperated in a very perceptible manner.

The irritation appears to have its seat in the prostate, yet the pain is variable; sometimes the bladder is affected, and then the urine is red and troubled; sometimes it is the anus that is affected, and then it is clear, retained a long time, and passed with facility. It is the fatigue produced by walking especially, that brings on the nocturnal pollutions.”

I found the canal perfectly free; but the catheter was arrested several times by spasmodic contractions, and caused very acute pains, particularly in approaching the bladder; the patient was convulsively agitated, and uttered piercing cries, although he was firmly resolved to bear all.

I practised a cauterisation from the neck of the bladder to the bulb of the urethra. It produced its ordinary effects, that is to say, a momentary increase of all the symptoms, then their progressive decrease from the third day, with the feeling of increased strength in the parts cauterised and in those connected with them.

The seminal losses that took place during the emission of urine and fecal matters gradually disappeared, and the nocturnal pollutions became more rare. Still the itchings of the anus continued; the stomach was yet feeble and irritable; and there remained a high degree of nervous susceptibility; all which circumstances made me prescribe for the patient the baths and douches of *Aix en Savoie*. I learned that he experienced very beneficial effects from them, but have not since heard from him.

The nervous constitution of the patient, the masturbation, and the darts affection seated at the margin of the anus, contributed without doubt to the development of the pollutions, but it was the blennorrhagiæ that left in the canal that obstinate irritation of which the consequences were so injurious.

Here again we see the sperimatic and urinary organs affected in the same manner and degree; but the rectum also plays an important part in the production of the symptoms.

The patient himself had correctly discerned that the prostate was the principal seat of the disease; but he was confounded by the continual variations that he observed in the symptoms, according as the rectum or bladder became more particularly the seat of the irritation. The urethra, the vesiculæ seminales, and even the testicles, were each subjected to its influence, at different periods of the disease.

These continual and sudden changes of the irritation are very common when there exists any darts affection, and thus they contribute to render the diagnosis of diurnal pollutions more obscure, from the confusion they throw into the narrations of the patients and the mind of the practitioner. However, it is easy to account for them when we reflect upon the connections that exist between the mucous membrane of the urethra, bladder, vesiculæ seminales, and rectum. The influence of the seminal losses was principally felt by the digestive organs, and M. R. understood well the intimate connection that existed between them and the symptoms of his gastritis. It is a very common phenomenon, but one which patients do not always account for in so precise a manner.

It is well also to remark, that the cauterisations practised by M. Velpeau, not only re-established in a permanent manner the natural condition of the canal, but caused an almost entire cessation of the nocturnal pollutions for several months: probably they would have effected a cure if the patient had not indulged, a short time after, in fatiguing walks and rides on horseback.

Yet these cauterisations must have been applied to the strictured part of the canal only, and the pollutions were kept up by the irritation of the mucous membrane situate behind it. We may judge from that of the influence that the nitrate of silver must have, when it is applied directly upon the orifice of the ejaculatory duct.

We have seen what disastrous effects baths of salt water produced: these results are not rare, and they are easily explained by the irritable state of the genito-urinary organs; but there are few patients who watch themselves with so much care as M. R., and who render so clear an account of their observations.

In cases of this nature, the nocturnal pollutions becoming less frequent, they conclude from it that the salt water baths fulfil the proposed indication, which makes them persist in their use, notwithstanding the increasing aggravation of the general symptoms: when they are at length forced to renounce them, they suppose that the salt baths would have cured the patient, if his constitution would have permitted him to continue them; they do not see that the nocturnal pollutions diminish because the semen is expelled with the urine or during defecation; because these continual losses must eventually render the others impossible.

Fresh water baths produce every day the same illusion. I point this out more particularly to the attention of physicians, because these powerful means really produce the most advantageous effects when there is no irritation.

The hydro-sulphurous baths are not liable to the same inconveniences, and they are also tonic. There was still another indication to be fulfilled in this case; but I shall have to return very soon to the darts affections considered as a cause of pollutions.

No. 26.

Frail constitution — Masturbation — Syphilis — Blennorrhagia — Excess of every kind — Pollutions — Cauterisation — Notable amendment — Hydro-sulphurous baths — Cure.

The Marquis de L., born in Biscay, of a feeble and slender constitution, had succeeded in improving his health by means of exercise, when being placed at a boarding school, he led a sedentary life, and indulged in masturbation. He renounced it as soon as he was able to have connection with a woman; but he contracted very soon chancres and buboes, that got well under the ordinary anti-syphilitic treatment.

Numerous venereal excesses reduced him, at the end of three years, to a state of emaciation and exhaustion that forced him to continence; he regained, then, rapidly his strength and embonpoint.

A short time after, he married a young person with whom he abused the rights of matrimony.

Being a widower in 1823, he resided at Bordeaux, where he gave himself up to coition and dissipation; then at Paris, where he contracted a blennorrhagia; being improperly treated it frequently returned, in consequence of his excesses or rides on horseback.

After numerous relapses and various treatment, the patient perceived, on going to stool, that he passed semen by the canal, and that his urine was at times thick and whitish.

A physician advised the use of women; he found himself worse from it. Another prescribed pills, continence, &c., which succeeded no better. He was then treated with cold baths, spirituous frictions upon the genital organs, a milk diet, &c., with as little success.

He got better in consequence of a journey to England and Belgium. But a new urethritis, contracted at Paris, left him in a more unhappy condition than ever. He lost semen every time that he went to stool, and even in urinating; he was meagre and pale, excessively irritable, melancholy, and disgusted with every thing; his limbs would scarcely support him, yet he could not remain stationary.

It was in this condition that he came to ask my advice. I found his urine muddy, of an infectious odour, containing a thick and flocculent cloud; the urethra was exceedingly sensitive.

I essayed at first to leave an ordinary catheter in the canal, for a half hour or an hour, every three or four days; but not obtaining any evident advantage from it, I decided to cauterise the prostatic portion of the urethra.

Very soon the appetite returned, digestion became better, the embonpoint and strength increased gradually; nocturnal pollutions came on, but the seminal losses that had taken place during defecation diminished, and the urine became transparent.

Still the first symptoms reappeared from time to time in consequence of some indigestion, ride on horseback, sudden cold or late hours at the ball and especially at play; or else, after some other imprudences that the patient daily committed.

The watering season having arrived, I sent the Marquis of L. to Bagnères de Bigorre: he found them injurious; I advised him to go to St. Sauveur—he obtained the best effects from them.

The following year I advised the waters of Barèges; he remained there two months, and his health was completely re-established.

For ten years his cure has remained complete. He re-married, and when I saw him, three months ago, he assured me that his pollutions had entirely disappeared, and that he had never been more vigorous. He was, besides, the father of three children.

The Marquis of L. was feeble from birth, and his constitution had also been injured by excesses of every kind, which a robust temperament could scarcely have borne; blennorrhagic and syphilitic affections must have left in the genital organs traces of their presence, and multiplied remedial agents completed the ruin of his health. A careless and trifling disposition made this grown child commit a great many imprudent acts, and the return of strength was inevitably followed by some relapse. The cure presented, then, the greatest difficulties, yet it was complete.

I think that the hydro-sulphurous baths contributed as much to it as the cauterisation; but they would not probably have produced the same effect in the first instance.

No. 27.

Masturbation—Blennorrhagia—Injections—Cystitis—Diurnal pollutions—Injurious anti-venereal treatment—Cauterisation—Thermal waters—Cure.

M. F., born in Catalonia, of parents subject to hemorrhoids, endowed with a good constitution, passed the first thirteen years of his life in a state of perfect health; but the development of the genital organs gave rise to imperious desires that led him to excesses in masturbation: they were continued for nine years, without however producing any appreciable derangement of his health.

In 1830, M. F., aged 22, contracted a blennorrhagia that was treated by astringent injections; very soon after, there came on an orchitis, accompanied with acute pains in the canal; yet the injections were continued for twenty days, that is to say, to the time when the patient, no longer able to bear them, consulted another physician.

This one prescribed alternately a large dose of copaiba, and the next day a bath. Under the influence of this new treatment, the erections became more painful, the spongy tissue of the urethra more rigid, curvature of the penis greater, and the discharge more abundant.

From that time the patient gave up all remedies, and these acci-

dents were gradually dissipated; but the running persisted till 1831, when it disappeared, without any known cause, to give place to symptoms of inflammation of the bladder, characterised by great pain in the hypogastrium, a continual vesical tenesmus, with frequent twinges in the fossa navicularis, vivid redness of the urinary orifice and prepuce, a pressing and irresistible desire to pass urine, which, in its emission, caused a burning sensation, and, on cooling, deposited a sandy and grayish sediment.

At a later period, sinapisms to the thighs; very abundant mucous deposit in the urine; leeches to the hypogastrium, eruption of pimples, relief; fomentations with vinegar; cure of the pimples; intense pain in the kidneys; leeches to the loins, warm baths, demulcent drinks, sub-carbonate of potash, ammoniacal frictions, emollient cataplasms; no lasting improvement.

This want of success gave rise to the belief in a syphilitic cause: they prescribed, in consequence, mercurial frictions, sarsaparilla, and *the rob de Laffeteur*; but this treatment only aggravated the symptoms.

In 1832, the patient took, in Spain, some very energetic, natural sulphurous baths, at thirty degrees of temperature of Réaumur's thermometer; he drank, also, of the same waters at forty degrees. At the end of ten days he experienced a diarrhœa, a considerable swelling of hemorrhoidal tumours, with repeated and abundant losses of blood: accidents that forced him to suspend the use of the waters at the end of ten days. From that time the patient was subject to vertigo, to frequent blindness, and to continual ringing in the ears.

In September, 1832, twelve mercurial frictions, alternated with warm baths: increase of the cerebral and genito-urinary symptoms.

At the commencement of 1833, eighteen mercurial frictions; sublimate internally; fumigations with cinnabar, &c. In spite of the most severe regimen, and the exhibition of opiates, this third anti-venereal treatment was as injurious as the preceding.

The patient then came to Montpellier in the following state:—

Face yellow, bloated; eyes sunken, surrounded by a lead coloured circle; gait staggering like that of a drunkard; vertigo, humming in the ears, throbbings in the temples; palpitations, anhelation, especially in walking, which is toilsome, and often provokes convulsive movements of the limbs: digestion laborious, accompanied with flashes of heat and a considerable development of gas; stools softer than in the normal state; frequent colics; heat of the anus; hemorrhoids painful and bleeding; pains that traverse the abdomen, passing through the kidneys and hypogastrium; erections rare and incomplete; emission of urine very frequent, in a bifurcated stream, with pain at the neck of the bladder; urine depositing a grayish sediment, sandy, above which float some flocculent mucosities; disengaging, a short time after its emission, an odour of rotten flesh; slight stricture two inches from the urinary orifice; excessive sensibility of the urethral mucous membrane: frequent seminal losses

during defecation : decrease of the mental powers, and of memory ; profound hypochondriasis ; disgust of life.

I cauterised superficially the neck of the bladder and the prostatic portion of the urethra.

The improvement was not as marked as I had anticipated. I should have practised a second more energetic cauterisation, if the season of the thermal waters had not arrived.

I sent the patient at first to Bagnères de Bigorre, where he became worse ; and very soon after to St. Sauveur and to Barèges, from which he derived the best effects.

On his return, I put him upon the use of tarred water, of terebinthinate pills, and submitted him to a milk diet. The happy results of this treatment rendered another cauterisation unnecessary.

The following spring I sent M. F. to the hydro-sulphurous baths of Arles (near Perpignan), where his health became completely re-established.

When I saw him, not long ago, his countenance was smiling, and of a healthy colour : he had regained his embonpoint and vigour ; he retained his urine for a long time, and passed it without pain ; it remained transparent after cooling, and no longer exhaled any bad odour. The seminal losses had disappeared, the erections were frequent and energetic.

To give an idea of the change that has taken place in M. F., I ought to say that he can scarcely believe it himself, and that in order to convince himself of it, he must read over the various consultations of which he has been the object ; consultations that he always carries about him, and which he was not even willing to confide to the student whom I had appointed to commit his case to writing. In fine, he had made his last journey to Montpellier for the sole purpose of enjoying the surprise that his appearance would give me, and it was in reality with great difficulty that I recognised him.

I treated the brother of this patient for a stricture ; all his family is, like him, subject to hemorrhoids : did there exist then, here, a pre-disposition to the genito-urinary affections, as there did to hemorrhoids ?

However it may be, masturbation had certainly already debilitated the spermatoc organs, when the blennorrhagia appeared, and it becomes necessary to take this into consideration.

In consequence of injections, the inflammation very soon extended itself to the testicles ; a little later, the discharge is suppressed, and the bladder, with the kidneys, become inflamed. Here is then another case in which the disease extended itself equally in the direction of the urinary and spermatoc organs, and that too with the same degree of energy.

The frequent emission of urine, and the spasmodic contractions of the bladder, enable us to explain the pollutions produced by the convulsive contractions of the vesiculæ seminales, during the emis-

sion of urine and defecation. It was not then the compression of the vesiculæ seminales that caused the evacuation of semen. The patient had a diarrhœa or very easy stools.

I do not pretend to deny the influence of this compression in many cases; but it is a mistake to believe it to be the only cause of the seminal losses that take place during defecation. On a more close examination, it would soon be remarked that these losses are often provoked by diarrhœa, and are not always noticed in the most violent efforts of defecation: besides, the vesiculæ seminales are not compressed by the urine, when the bladder contracts in order to finish its expulsion; yet seminal losses frequently take place at that moment.

We must admit, then, that the vesiculæ participate in the irritation of the rectum and bladder, and that they contract simultaneously. This connection can be easily conceived of, when we reflect that the same arterial trunks, the same nervous plexus, are distributed to the reservoirs of the semen, urine and fecal matters.

Cauterisation did not produce immediately a very evident amendment; but must we conclude that it had no influence upon the cure? I think not, and for this reason.

At the beginning, the patient tried the hydro-sulphurous baths: after the tenth bath, he was compelled to give them up, the symptoms became so much exasperated under their influence: yet, after the cauterisation, they produced only advantageous effects, and the succeeding year they finished the cure. Results so opposite, can only be attributed to the decrease of sensibility in the mucous membrane of the urethra, and this modification cannot have been effected in any other way than by cauterisation.

We see again in this case, anti-venereal remedies obstinately administered, although the patient had only a simple blennorrhœa: they did more injury than the injections and copaiba.

No. 28.

Feeble constitution—Precocious excesses—Blennorrhœa—Syphilis—Diurnal pollutions, cerebral symptoms, &c.—Failure of the ordinary means—Cauterisation—Hydro-sulphurous baths—Cure—Relapses—Consecutive venereal symptoms—Anti-syphilitic treatment—Definite cure.

The following case was sent me by a distinguished practitioner, whom I had the happiness of raising from a deplorable situation; it is perhaps rather long, but the valuable details with which it is filled, have prevented me from abridging it.

“I was born very feeble, with an inguinal hernia: I was subject during my infancy, to a very copious and obstinate purulent otorrhœa, especially of the left ear. I became strengthened, however, by habitual exercise in the open air, a substantial diet, and frequent river baths: at 13, I was as robust as most of my comrades.

At that epoch, an ardent but wary young girl, aroused in me premature erections, and abused them to assuage her desires, until

the time when seminal emissions inspired her with fear. I taught in my turn her younger sister all that I knew. These precocious enjoyments developed factitious wants that led me to masturbation, when it was impossible to satisfy them otherwise.

At 16, I contracted a blennorrhagia, that I carefully concealed, and which disappeared slowly under the influence of cooling drinks, warm baths, and a strict regimen. The running re-appeared twice the same year, after an immoderate use of new beer: from that time, it has been often renewed, in consequence of a forced march, a cold, or a ride on horseback.

At 18, I had an assignation with a woman that I loved much, but I experienced such a degree of agitation, that it was impossible for me to profit by it. I attributed this catastrophe to the excess of my passion; but I was deeply chagrined by it, and became very suspicious of myself.

I was more fortunate the next year with another woman; but I paid dear for the excesses I committed during that night: the next day my running re-appeared with violence: there came on then an inflammation of the testicles: the epididymis of the right side remained engorged for five or six months.

From that time my health became more and more deranged; I had jaundice, paroxysms of fever, wandering pains over the whole body, and derangement of the stomach: I became very susceptible to cold, to heat, to moisture, and to every sudden atmospheric change. The feeble state of my health induced me to give up a military career, and led me to the study of medicine.

Arrived at Paris, I perceived that the moist cold of the streets, and dissecting amphitheatres, readily brought on a return of my running: that the sitting attitude, too long continued, heated the perineum, causing there a weight and darting pains.

These phenomena increased to such a degree, that I thought I had the stone: I felt a constant pain in the fossa navicularis; I urinated very often and with pain; the last drops of urine were stringy, glairy, and produced at the neck of the bladder a sensation like that of a red hot iron. I was determined to be operated upon, but Professor Boyer before sounding me, prescribed baths that allayed the irritation. The vacation arrived, and exercise dissipated all these symptoms.

The following year, I studied night and day to prepare myself for the *concours*: my digestion became deranged: I had a diarrhœa accompanied with violent tenesmus: on going to stool, I often rendered semen in abundance. Too much prepossessed to give to this circumstance all the attention that it merited, I wished to continue my studies; but I experienced vertigo, ringing in the ears, and syncope; I could no longer comprehend any thing: I was obliged to forego all occupation: it appeared to me every moment that I was going to have an attack of apoplexy.

The third year, I was subject to palpitations that made me think of an aneurism of the heart: still later, I experienced pains in the

chest, an obstinate cough, and I became persuaded that I was consumptive. In fine, after my reception, I went home emaciated, with a yellow complexion, and very melancholy. The inovement of the carriage brought back again my gleet.

A short time after my arrival, I contracted a venereal disease, that I treated with mercurial pills. This treatment finished the ruin of my health, and I discontinued it as soon as the external symptoms had disappeared. Then came on a chronic gastritis, accompanied with an obstinate constipation and profound hypochondriasis.

The flatuosities that tormented me, made me seek solitude ; when I retained them, I experienced very soon a general movement in the abdomen : I felt them accumulating in the stomach, and distending it beyond measure ; it appeared to me that a haud of iron was producing a kind of internal strangulation, that closed the whole passage : the movement of the diaphragm was prevented by the violence of the pains and distension of the belly ; I felt as if about to be suffocated ; my face became purple ; a copious sweat covered my whole body ; at length this strangulation ceased, and I was delivered : but I did not get rid of the fatigue and icteric tinge for several days.

For two years I combated this chronic gastritis by leeches, baths, injections, and the most severe vegetable diet ; I indeed lived for eighteen months upon milk : all without success. I felt a constant desire to eat, and as soon as I had taken food at all substantial, I was overcome by the labour of digestion.

At length I remarked that I passed semen in the violent efforts produced by constipation ; and very soon I assured myself that I lost it also in urinating.

Then only I understood the cause of all my troubles ; I hastened to obtain the translation of Wickmann by Dr. Sainte-Marie, I read it with avidity, I learned it by heart, and I thought myself saved ; but I was still to experience many disappointments.

The fresh water baths and cold hip baths produced an injurious impression upon the bladder and the vesiculæ seminales ; when I entered the water, I felt these reservoirs contract spasmodically, and the urine that I was obliged to render contained an abundant and flocculent cloud, owing to the presence of a great quantity of semen.

Cold lotions produced only a momentary effect.

Cold injections excited an insupportable tenesmus in the rectum, accompanied with pain and weight ; they favoured the expulsion of the fecal matters by inducing contractions of the rectum ; but these spasmodic contractions were very soon followed by those of the vesiculæ seminales, and with an abundant loss of semen. I can hardly describe how much these cold injections injured me.

The ice that I took internally in great quantity gave tone to the system for a short time ; it stopped the constipation and provoked energetic erections, but it very soon brought on an inflammation of

the bladder and prostate, which manifested itself by a painful heaviness in the region of the rectum, by cutting pains behind the pubis, a frequent and irresistible desire to urinate, and a very abundant glairy and puriform sediment, that adhered strongly to the bottom of the vessel.

The applications of ice upon the loins and perineum were followed by the same results.

Cinchona, Spa water, and tonics produced good effects for a day or two, but they very soon increased the irritation of the bladder and canal; they brought back the constipation.

Attributing to the pressure of the fecal matters the seminal losses that took place during defecation, I resolved to employ the process resorted to by Professor Boyer for fissures of the anus: consequently I myself divided the sphincter before a glass, with a lithotome that I had made for this purpose. The expulsion of the fecal matters became more easy: but the seminal losses were not diminished by it.

I applied cauteries to the loins and perineum, to combat the pains seated about the neck of the bladder: I tried unction and even acupuncture, in order to stop the spasmodic contractions of the vesiculæ seminales, that I felt very distinctly, especially when I was seated: they threw me into despair, for they announced an inevitable pollution. These different methods succeeded for a short time, but their effect was never durable.

I often made use of injections, with a decoction of poppy heads, to calm the irritation of the genital organs and to procure a little repose.

No language can describe the anxiety and despair that these long sleepless nights caused me. Dreams the most frightful, ideas the most black, led me incessantly to the contemplation of suicide. It was always with terror that I saw the moment arrive for going to bed, and I looked for the approach of day as a relief. It was against this torment in particular that I employed narcotic injections; but they increased the torpor of the rectum and the relaxation of the genital organs. Besides, they excited violent pains in the head and disturbed the digestive functions; they increased the habitual somnolency that tormented me by day and rendered me incapable of any serious occupation.

It was in this state of complete nullity, in every respect, that I arrived at Montpellier in 1824, deeply disgusted with life.

The cauterisation that you practised upon the prostatic portion of the urethra was rapid, and did not cause so much pain as I expected; for twenty-four hours only the emission of urine was painful and accompanied with some drops of blood. Besides, this *frank* pain, although much more acute than that I had before experienced, appeared to me much less disagreeable, being accompanied with a feeling of vigour that gave me courage.

From that moment a complete revolution took place in my whole body. From that time I commenced a new existence; it

appeared to me that a thick cloud had been dissipated from my brain.

At the end of eight days my urine was limpid, its emission took place with energy; the stools were passed with facility, and were no longer accompanied with seminal losses. I felt a vigour in the canal, the bladder, and the rectum, that gave me confidence. Sleep returned. I could very soon eat every thing, and my appetite was voracious. The erections had an energy that I had never before observed.

A short time after I took the waters of Bagnères de Bigorre; they did not produce the effect upon me that you expected from them; they caused a great dryness of the skin, diarrhœa, and tenesmus; they recalled the irritation of the bladder, and with it the pollution; but the waters of Cauterets dissipated all these accidents, and I preserved, for the remainder of the year, the improved state of health produced by the cauterisation. From that period, Spa water, ice, and cold applications did me also much good.

In the spring of 1825, I had a return of the vesical and prostatic irritation, which I attributed to the influence of the season. The second cauterisation that you then practised was as efficacious as the first, and the waters of Barèges did me still more good than those of Cauterets.

In 1826, I experienced, (always in the spring,) a slight return of the old symptoms. This time I cauterised myself, and I went to the baths of Aix en Savoie, where my health became again re-established.

In fine, in 1827, I had another relapse at the approach of spring. There came on a hard and painful swelling of the left breast, that increased in a slow and insensible manner. I knew not how to account for this swelling, which was a source of great anxiety to me, when an excrescence in the form of a cauliflower came on at the base of the gland, which reminded me of the chancre that I had had in the same place. The pills of Sédillot, which you prescribed for me, dispelled the swelling of the breast and the excrescence of the gland. But I still took the muriate of gold and the syrup of sarsaparilla, that you recommended as an additional precautionary measure.

Since then my health has continued good, and I ought to say also that at the present day it is more robust than at any other period of my life. I could certainly do, in every respect, what I could not have done at twenty years of age. The erections are more energetic, the ejaculation is not hurried; it is accompanied with sensations which, for vivacity, were before unknown to me. My intellectual functions have acquired a new vigour: if they had been in as good a state when I was upon the seats, my career would not probably have been so limited.

However, I esteem myself very fortunate in being delivered from the frightful disease that for twenty-one years poisoned my existence. I am the more surprised at it, as I must have been hereditarily predisposed to it.

After having studied upon myself the general symptoms that accompany diurnal pollutions, I soon observed them upon my father, and I learned that for the last thirty years he had experienced abundant seminal losses on going to stool; losses of which he had never suspected the character or seriousness, and to which I attributed the infirm state of his health for the last thirty years.

In fact I have had the happiness of curing him by accompanying him to Aix, and although he was sixty-five years of age, he experienced a physical and moral improvement that still endures. I ought to add that I resemble my father in a striking manner. I should have thought my history incomplete if I had not made mention of these facts in relation to him."

Here is again a case that proves the importance of particular facts to the study of the obscure and varied diseases with which we are occupied.

We have not as yet met with so many causes concurring to produce or keep up diurnal pollutions.

Independently of the hereditary predisposition, which it is difficult not to admit in this patient, there existed an original weakness of constitution that could not be completely eradicated. Premature enjoyments and excesses in masturbation must have had a fatal influence upon an individual poorly able to sustain them. A blennorrhagia concealed and badly treated left also an impression upon the genito-urinary organs still more serious; the slightest cause reproduced the discharge; the inflammation eventually extended to the testicles by the way of the excretory ducts, and afterwards to the bladder and kidneys.

From that time the life of the patient became one of the most wretched. He experienced successively symptoms of almost all diseases without suspecting their true cause. At length he contracted a venereal disease that finished the ruin of his constitution.

Yet he eventually triumphed over the influence of all these causes. This result, remarkable and complete, is well suited to encourage patients and practitioners in difficult cases.

Cauterised three times, the patient believed himself cured each time, and the next year experienced new difficulties, less serious than the first, but still of the same nature, which did not disappear definitely until after an anti-venereal treatment. It was, then, in this case, indispensable.

I have already remarked, in several instances, how disposed patients and physicians are to believe in the existence of a latent venereal virus in cases of pollutions preceded by blennorrhagia, and how fatal an influence this prejudice exercises upon the treatment. It was necessary to point out this dangerous tendency, but it would not be less injurious in some cases to go to the opposite extreme, and suppose it never to exist.

This patient had had a chancre upon the penis; he had abopted but a very incomplete treatment, because his constitution would

not bear mercurials: at a later period there came on a tumour in the left breast, then an excrescence where the chancre had made its appearance; it was not possible from that time to overlook the consecutive venereal symptoms. The effects of the treatment have satisfactorily proved that the relapses were owing to the existence of a syphilitic virus, although it had not yet manifested its presence by any characteristic symptom.

What conclusion must we draw from all this? that the practitioner ought to rid himself of all exclusive ideas, of prejudices of every character; that in doubtful cases he ought to be guided by the antecedent, and especially by the co-existing symptoms; that he can, when every thing else fails, try cautiously an exploratory treatment; but this he ought to renounce as soon as he perceives any bad effect from it. Anti-venereal remedies have certainly been abused in a deplorable manner, but this is not a reason for prescribing them.

It is well to remark that the patient bore perfectly well this second treatment, although he could not go through with the first. This, then, is because a favourable change had been effected in his constitution; it had repaired its powers, and his organs had lost their susceptibility. The same has happened in regard to the use of ice, tonics, cold baths, &c. These means at first only exasperated the chronic inflammation of the genito-urinary organs. But when this inflammation had yielded to the influence of cauterisation and sulphurous baths, they acted with the same beneficial results as have been observed in cases of simple weakness of the organs.

It is owing to their not having made this important distinction, that Wickmann, St. Marie, &c., have advanced general propositions, the application of which is often injurious.

I could report many other cases of the same nature; but there are some in which blennorrhagia plays only a secondary part, and which will be better placed elsewhere; others are too incomplete to present any interest after those just read.

These deficiencies are owing to different causes; sometimes the patients left before the termination of their treatment, sometimes they have had relapses of which I have not exactly learned the causes and effects; in fine, in some cases the cure was certainly prompt and permanent, but I neglected to complete the history of the disease by a detail of the treatment and its results.

I depended upon these documents because I knew they were in my portfolio; but when I wished to use them, some years had elapsed, a multitude of new facts had presented themselves; I found that I could no longer trust to my memory, and I did not wish to abandon myself to my imagination.

Among the cases that I the most regret not having finished at the proper time, are those, particularly, of two students, who, in consequence of an intense blennorrhagia, had a swelling of the

testicles, accompanied with bloody nocturnal pollutions. These two facts have remained deeply impressed upon my memory, on account of the terror that the presence of blood in the semen inspired in these patients, and especially on account of the inferences that I drew from them as to the manner in which the inflammation is transmitted from the urethra to the testicle.

I am certain that a single cauterisation was sufficient to effect a cure, but the notes relative to these two patients containing nothing in reference to it, I am unwilling to supply the deficiency.

Causes. I have said that the cause of the pollutions was the most important circumstance to be considered, and this truth will become more evident as we advance; but it often happens that several causes have acted simultaneously or successively, and that we are not able to establish clearly which it is that has exercised the greatest influence in the production of the seminal losses.

Blennorrhagia is the most energetic, the most direct of all these causes; it is also the one whose action it is the most easy to appreciate: this is why I have first reported the cases in which blennorrhagia acts the most prominent part. Yet when we examine them separately, with some attention, we very soon remark that the running was preceded, accompanied, or followed, by grave circumstances, capable, in themselves, of provoking seminal losses; it is important, then, to investigate them: the following are the most remarkable.

One of these patients, of a poor constitution, had probably an hereditary predisposition to diurnal pollutions since his father was affected by them (No. 28); another was of a distinctly marked lymphatic temperament (No. 10); several were born feeble, delicate, and nervous; their health had been deteriorated from infancy by a bad regimen, a too sedentary life, &c. (Nos. 20, 24, 25, 26); others had darts eruptions (Nos. 13, 22, 24), hemorrhoids (Nos. 24, 27) or varicoceles (No. 22).

The greater part abandoned themselves to excessive coition (Nos. 11, 19, 26), to masturbation (Nos. 12, 22, 24, 25, 26, 27), or else to alcoholic drinks (No. 13).

The blennorrhagia was sometimes neglected by patients too timid to confide in any body (Nos. 1, 28), or too careless (Nos. 13, 14, 16, 25) and too much occupied to pay suitable attention to it (No. 23); at other times the treatment was trammelled by imprudence or excesses (Nos. 23, 26); oftener it produced injurious effects from its very nature (Nos. 10, 11, 14, 15, 20, 27).

Several of these patients had two blennorrhagiæ (Nos. 10, 18, 21, 23, 25), four (No. 16), and even seven (No. 19), before experiencing pollutions.

I ought, however, to remark here, that the frequent reproduction of these runnings is not always owing to new infections (No. 16), as patients and many practitioners are disposed to believe: this is proved by the facility with which these discharges are reproduced

without there having been any coition (1, 18, 26, 28). This disposition is, besides, easily conceived of when we consider the development that the capillary system of the mucous follicles must preserve in consequence of prolonged or repeated inflammations.

These cases almost always terminate in pollutions. It is almost inevitable, in fact, that this disposition of the prostatic mucous membrane should extend, sooner or later, to that of the spermatic vessels. True, we must not take for semen the mucus that habitually moistens the urinary meatus of these patients: but we must also guard against treating too lightly their apprehensions in this respect, since these chronic catarrhs of the urethra accompany so often seminal losses; it is an indication that we ought not to neglect.

These pollutions were kept up in a very evident manner by the venereal virus; indeed they did not cease entirely until after the adoption of an anti-venereal treatment (No. 28).

In other cases they did not appear to experience any influence from the venereal virus, nor from the means employed to combat it (Nos. 19, 26).

These means were used also with a greater number of patients who never had any thing but gleet (Nos. 10, 12, 20, 22, 27).

In fine, in a still greater number of cases, anti-venereal treatments, either useless, too energetic, or too often repeated, produced a deplorable increase of the irritation of the genital organs, and determined the appearance or aggravation of the seminal losses (Nos. 10, 14, 17, 21, 22, 27).

Cases of this nature often present great difficulties in the diagnosis, and their solution is of the greatest importance in the treatment; but I cannot attend to it here. In the mean time, those who wish to consider the subject more attentively, can consult the cases I have just cited, and particularly the reflections at the close of No. 28.

The anti-venereal remedies were not the only therapeutical agents that produced injurious effects; those indiscriminately employed for blennorrhagiæ from the mere force of habit were not less fatal; among them must be especially reckoned the astringent injections (Nos. 18, 20, 27), copaiva (Nos. 14, 15, 17, 18, 23, 27), cubeb (No. 11), tonics and bitters (Nos. 10, 15, 20), prematurely used or in too large doses.

All these means acted in a manner more or less stimulating to the genito-urinary organs; it is then easy to conceive that their untimely or immoderate use must favour the extension of the inflammation to the mucous membranes that are continuous with that of the urethra.

I am far from wishing to proscribe the use of them; I even acknowledge, willingly, the advantages we derive from them in the treatment of blennorrhagiæ, when we have suitably combated the inflammatory symptoms; for a moment arrives in the case of the mucous membrane of the urethra, as in that of all others, where

tonics and astringents are perfectly indicated; but in the profuse manner in which they are every day used, they certainly do more injury than good.

In fine, the seminal losses were often exasperated by the very means employed to combat them, and here I do not wish to speak alone of anti-venereals, &c., but of the means lauded by those persons themselves who have written upon pollutions: the cold baths, ice, tonics, bitters, and sulphurous baths, are of this number (Nos. 10, 12, 15, 21, 25, 27, 28).

I very well know that these remedies have not proved injurious, like those for blennorrhagia, simply from the indiscriminate use that has been made of them: but since we are endeavouring to appreciate the causes which have aggravated the seminal losses, we must not overlook these unfortunate effects.

To sum up the whole, it is indeed the blennorrhagia that has exercised the greatest influence upon the production of seminal losses in all the cases that I have reported up to the present time; still it has very rarely been sufficient to bring on alone this unhappy termination.

The necessary causes that contributed to it are each, separately, susceptible of provoking more or less grave seminal losses; they must, consequently, exercise too great an influence to be overlooked; but they were numerous and variable; they succeeded each other or were combined in so many ways, that there are no two cases which exactly resemble each other.

The more we advance, the more we shall see how far we are from being able to describe pollutions as simple identical affections; how important it is to consider them in all their bearings, and to keep an account of all the circumstances that have concurred in their development. It is in practice that we feel strongly the necessity of weighing every thing, before establishing the diagnosis, the prognosis, and especially the treatment.

But let us return to the blennorrhagia which is at present under consideration, and see in what manner it must act in order to determine pollutions.

Mode of action.—In all these patients, the urethra had preserved an excessive sensibility, especially in the prostatic region; they felt there habitually pain, weight, heat, or cutting sensations, and painful ticklings; these sensations were exasperated by the passage of the urine.

Catheterism exercised with the greatest care, always caused them acute pains and spasmodic contractions, violent enough sometimes to resemble strictures. The catheter was especially arrested near the neck of the bladder, and often it did not penetrate it until a long time had elapsed: it appeared to the patients that it was passing over parts that were denuded; they became convulsively agitated, and all the power of their will was not always sufficient to prevent them from committing imprudences: the countenance became cadaverous, and the whole body covered with a profuse sweat: as

soon as the catheter was withdrawn, there ordinarily flowed out a perceptible quantity of red, *rutilant* blood.

These different phenomena, more or less marked in all these patients, clearly indicate that the mucous membrane of the urethra had preserved an excessive sensibility, especially in the prostatic region: several are even of a nature to lead us to believe that it was fungous, very vascular, and excoriated.

Some of these patients experienced symptoms that indicate more positively an affection of the prostate, such as perceptible swelling of that organ, feeling of weight in the rectum and perineum, darting pains at the neck of the bladder, behind the pubis, &c. (Nos. 11, 14, 15, 22, 25, 28). In one of them, the inflammation of the prostate even terminated in suppuration (No. 18).

In many others, the testicles were swelled, inflamed, and painful (Nos. 10, 11, 22, 24, 25, 27, 28).

The cords of the spermatic vessels also sympathised in the state of the testicles, (Nos. 10, 11, 22, 24, 25, 28). In fine, in three cases, the seminal losses were bloody and puriform (No. 21).

Thus, in all these patients, the blennorrhagia had left in the urethral mucous membrane a vivid irritation, a morbid sensibility, more marked in the region of the prostate, the principal seat of the ancient disease. In many cases, the inflammation had extended its influence even to the testicles, by the way of the excretory ducts, which must render it probable that the spermatic organs preserved the same susceptibility as the urethra.

The same phenomena manifested themselves in regard to the urinary passages: their resemblance is remarkable in more than one respect.

Several of these patients had acute inflammations of the bladder (Nos. 13, 14, 21, 27). Others had symptoms of chronic cystitis (Nos. 11, 15, 19, 24, 28). In some the inflammation appeared to extend even to the kidneys, if we can judge of it by the pains, the spasms, and draggings experienced in that region; by the changes observed in the urine, &c. (Nos. 10, 11, 21, 22).

These symptoms are the only ones that permit us to appreciate the state of those organs situated beyond the reach of our senses; but analogy comes to confirm the inferences that we draw from them. After having proved in the most unequivocal manner, the existence of orchitis, we can under the same circumstances believe in that of nephritis, seeing symptoms that it would be difficult to explain in any other way.

Besides, the examination of bodies have proved that these analogies were not deceitful; since grave and varied alterations have been found in the kidneys, that could only have been produced by inflammation.

All these patients, without exception, passed in the 24 hours, a greater quantity of urine than in the healthy state: so that when the kidneys have not been actually inflamed, they have suffered a

greater or less degree of irritation, or at least excitation, sufficient to increase perceptibly their functions.

The testicles are found in the same condition; for even when they have not been the seat of any inflammation or pain, their activity has been augmented; the semen has not only been expelled involuntarily, but it must also have been secreted in greater abundance than usual, else the seminal losses could not have been so frequent; the weakness and exhaustion would not have pursued so rapid a course.

The urine was not only more abundant, but had also changed its nature; leaving out of consideration the pus or mucosities that might be found in it, it was paler and more watery; it contained less urea and uric acid.

The semen had likewise lost its odour, its colour, and consistency; it was less elaborated.

In fine, all these patients experienced frequently, a desire to urinate, on account of the irritable state of the bladder: some could not retain their urine more than half an hour, or an hour (Nos. 11, 13, 14, 15). With all the desire was imperious, irresistible; the spasmodic contractions of the bladder overcame all the effects of the will: the emission was precipitate and convulsive.

These phenomena furnish an exact idea of what takes place on the part of the vesiculæ seminales, during diurnal pollutions: some patients even feel distinctly those fatal contractions that announce inevitable seminal losses (No. 28). Others were not sufficiently informed on medical topics, to give an account of them; but their description of symptoms would show that they experienced the same phenomena, even though analogy did not lead us to admit their existence.

This analogy is, however, striking, since it was especially during the expulsion of the last drops of urine, that these losses took place.

In fine, the two orders of symptoms have, in general, become ameliorated or exasperated at the same time, and under the influence of the same causes.

This remarkable resemblance is explained in the most simple manner, since the blennorrhagia has its principal seat in the prostate, where the spermatic and urinary organs join each other.

This method of investigating these two orders of phenomena, enables us also to ascertain better the cause and modus operandi of pollutions.

Treatment.—It is not astonishing, either, after what has been said, that cauterisation of the prostatic surface should have produced more direct and more powerful effects than all the other therapeutical agents.

It is well known with what promptitude and efficacy nitrate of silver modifies fungous injected and engorged tissues, the results of a prolonged inflammation. These effects are especially evident in scrofulous cases and in chronic ophthalmiæ. A short time after, the tissue becomes disengorged, contracts upon itself, becomes pale, and

acquires a new energy that effectually protects it from relapses, to which the patients are exposed, when the cure has been obtained by other means. It was this that led me to employ the nitrate of silver against chronic inflammations of the vagina and neck of the uterus, that induce so many leucorrhœas; against chronic catarrhs of the bladder, so rebellious to all other treatment; and I have always had reason to be satisfied with it.

Cauterisation produced the same effects upon the prostatic portion of the urethra; it has essentially modified the organisation and sensibility of the mucous membrane, and this change has very soon shown itself in the organs placed under its immediate influence.

Until the present time, a relaxation of the ejaculatory ducts has been considered as the only cause of diurnal pollutions, and this exclusive idea has caused the greatest injury; but it would be falling into an extreme equally erroneous and fatal, to attribute all seminal losses to irritation alone of the spermatie organs.

We have seen that one of these patients was cured by tonics alone (No. 11), another, by antiphlogistics (No. 10). I shall have occasion to report other cases of the same nature, but these are the most uncommon. There exists almost always, at the same time, in the spermatie organs, irritation and weakness, an excessive sensibility and little tone. This is also what we observe in chronic affections of all the mucous membranes: we might even say, that, in general, the organs and the individuals are the more susceptible to impressions the weaker they are.

In almost all cases of diurnal pollutions, these two states are observed simultaneously, but in different degrees: it is this in reality that disconcerts practitioners and throws the patients into despair; for antiphlogistics and tonics, emollients and stimulants, repose and fatigue, produce good or bad effects in the same individual, according as irritation or weakness predominates at the moment.

Cauterisation has the advantages of combating at the same time these two orders of symptoms: by destroying the surface of the engorged tissues, it changes their morbid susceptibility; resolution produces there a firm contraction, that gives them a new energy: this is the reason why cauterisation induces oftener a definite cure.

But when the disease has existed for a very long time, the genital organs participate in the general debility of the economy: after the chronic inflammation has disappeared, it is necessary to aid the relaxed tissues in regaining their former energy: nothing then contra-indicates the administration of tonics of every description; they finish the cure commenced by cauterisation.

This explains how cold baths, sulphurous baths, ice, &c., have succeeded with individuals to whom at first they had been injurious, (Nos. 22, 23, 24, 25, 26, 27, 28.)

Symptoms.—In examining the mode of action of blennorrhagia in the production of pollutions, I have already mentioned the symptoms peculiar to the cases I have reported: as to others, they

have presented nothing that we do not observe in all seminal losses; I could not therefore discuss them in this place, without exposing myself, hereafter, to useless repetitions.

I shall only further observe how insidious are the general phenomena provoked by these fatal evacuations, since they lead to the belief in cerebral affections, gastrites, diseases of the heart, urinary calculi, &c.

The first cause of these symptoms must be sometimes very difficult to discover, since two of these patients studied medicine to ascertain it; for ten and fifteen years they were incessantly occupied before suspecting it (Nos. 20, 28): we may judge from this of the number of diurnal pollutions that are overlooked.

CHAPTER IV.

CUTANEOUS AFFECTIONS.

No. 29.

Fourteen years of age—Scabies during ten months—After its disappearance, pain in the epigastrium—Tumour upon the left testicle—At a later period, chronic inflammation of the bladder—Diurnal pollutions—Hypochondriasis—At the age of twenty-eight, cauterisation—Prompt cure.

The following case was reported by the patient, a student of medicine: I have omitted those portions only that referred to myself.

“I enjoyed good health till the age of fourteen: at that period I had the itch; for ten months it was proof against all the remedies employed. Scarcely had the eruption disappeared, when I began to feel an acute and lancinating pain in the epigastrium, which afterwards became dull and extended. The itching that I felt over the whole body appeared to have become transported entirely to the head; especially so when I exposed myself to cold and moisture, or when I had the head uncovered. The scalp became covered with small pimples, which, breaking, were converted into quite extensive scabs.

A hard tumour of the size and figure of a bean developed itself upon the left testicle: it lasted eighteen months.

Digestion was performed with difficulty; my complexion became darkened; my shoulders saillant; the epigastric region was so tender that the weight of the bed clothes could not be borne; when I stood up it appeared to me that I had a ball suspended within.

The college vacation having arrived, I consulted the family physician, who attributed all that I felt to a too rapid growth. But little satisfied with his explanation, I went to seek out a bonesetter (*rebouteur*) well known in that region, who pretended to set the breast bone, applied a plaster, and dismissed me as I came.

This state of things lasted till my eighteenth year: at that

period I felt a slight pain in urinating, and was very costive; but the pain in the epigastrium diminished and I regained a little flesh.

At the age of twenty-two, in consequence of domestic troubles, and perhaps also under the influence of some excesses with women and of late hours, I experienced the following symptoms:

Increasing emaciation; lassitude from the least exercise; skin yellow, dry, and of a dirty appearance; heat acrid to the touch, especially in the palms of the hands and soles of the feet; formication over the whole body when I began to sweat; habitual feeling of heat internally; constant pain in the epigastrium and hypochondrium; obstinate constipation; digestion slow and laborious, accompanied with a development of gas, acid eructations, or an odour of rotten eggs; sometimes cold and clammy sweats, especially when I had taken some pungent or acid substance, or had met with the least difficulty, for I was extremely irascible; impossibility of long enduring hunger; difficulty of retaining urine; during its emission, pain at the base of the gland and contraction of the neck of the bladder; after cooling, urine red, muddy, containing a sediment brick coloured, with a large quantity of a flocculent substance held in suspension; venereal desires, but almost complete impotence; after the least erection, running from the canal of a gluey and transparent matter; on going to stool, abundant evacuation of a white serous matter slightly opaque; scabs and itching of the head; humming in the ears; loss of memory; slowness in the perceptions; self dissatisfaction; excessive timidity; disgust for all amusements except for solitary walks; profound melancholy without cause; discouragement; countenance sad and contracted; exacerbation of all these symptoms after riding.

I consulted different physicians, among whom I ought particularly to mention two distinguished professors of this faculty. All regarded my condition as nervous, and told me that I was a hypochondriac; but some advised demulcents, baths, a vegetable and milk regimen, exercise, and relaxation; others prescribed bitters, tonics, alterations, sulphurous preparations internally and externally, an issue, &c.

All these remedies were without effect, or rather, they exasperated my troubles, and I began to lose my hair.

Weary of this painful situation, I endeavoured to contract the itch again, either by inoculation with the virus, or by wearing the shirts that the diseased had just taken off; but not a vesicle made its appearance.

I was in this state, in my twenty-eighth year, when I heard you develop the history of my disease in one of your lectures. * * * You cannot imagine the pleasure I experienced in following you in the exposition of the numerous symptoms and diverse treatments of pollutions: I recognised myself at each word; I felt my hopes renewed. On leaving, I carried away with me the deep conviction of an approaching cure. * * *

The next day, June 10th, 1826, I went to visit you. * * *

The introduction of the catheter caused acute pain and determined spasmodic contractions of the canal, particularly on approaching the bladder.

You thought that the cauterisation would subdue the chronic inflammation, which induced the seminal losses, the cause of all my difficulties.

Your prognosis was fully verified, for eight days after that happy cauterisation I felt myself a little stronger; my limbs were already more free; my urine became clearer; I began to retain it a little longer; my countenance expanded and assumed a more cheerful aspect; my complexion became clearer. I had a nocturnal pollution, which had not happened for a great length of time.

At the end of three weeks, I found myself in a new state. For ten years I had not felt so well. The functions of the brain, stomach, bowels, bladder, and genital parts, were performed with a new energy; my skin lost its yellowish and earthy colour; the internal heat, fornication, &c., became dissipated.

Nocturnal pollutions, however, became very frequent: since the 4th of July to the present day, the 12th, I have had four: notwithstanding that, my strength increased daily. I hope that a second cauterisation will finish the cure of a disease that all other treatment has only exasperated."

I could not now say whether I yielded to this desire for a new cauterisation; but certainly I did not feel the anxiety caused in the patient by the appearance of the nocturnal pollutions.

When they succeed to diurnal pollutions, they indicate an evident amendment in the state of the genital organs: they prove, in fact, that the semen is no longer expelled, as formerly, in an almost continuous manner. Thus, this patient experienced from that moment a rapid improvement in all the functions, an increase of vigour, which under any other circumstances would be inexplicable.

The desire for a new cauterisation was not only owing to the fear of nocturnal pollutions, but also to a species of reverence for the agent that had produced results so prompt and satisfactory. This sentiment was even expressed with an enthusiasm that would have appeared suspicious or ridiculous, if I had allowed the least trace of it to remain.

Besides, this eagerness for cauterisation is experienced by many patients who have just witnessed its effects, and I have been often obliged to resist it. We must only decide to return to it when there is much left to desire; when all amendment has for a long time ceased: as long as it is making progress, however slow it may be, there is room to hope that regimen, exercise, and the moderate use of the organs, will eventually confirm the convalescence.

The prompt cure of this hypochondriasis treated for so long a time with so little success, by so many different means, proves sufficiently that it was owing to diurnal pollutions. But to what cause must these seminal losses be attributed?

After the disappearance of the cutaneous affection, there came on symptoms of a chronic inflammation of the stomach, then of the bladder; a tumour developed itself upon the left testicle, &c. We know the connection that exists between the skin and the mucous membranes: I have shown in what manner the affections of the urethra extend to the testicles: it is then easy to conceive how the irritation became extended to the spermatic organs, and in what manner it provoked spasmodic contractions in the vesiculæ seminales.

What proves further that the diurnal pollutions were really kept up by a chronic inflammation, seated near the neck of the bladder, is the pain that the patient experienced in that region; the frequent desire to urinate and the nature of the urine; the sensation produced by catheterism; and especially the prompt cure produced by cauterisation.

No. 30.

Cutaneous affections—Repeated gonorrhœas, &c.—One cauterisation—Cure.

M. N., of a spare habit and irritable constitution, subject to frequent and varied cutaneous affections, had in his youth some temporary gleans that always disappeared very soon. Afterwards he married and remained faithful to his wife.

Yet these discharges reappeared several times, varying in intensity and duration; alternating with dartrous eruptions more or less acute, sometimes with numerous boils; succeeding, at another time, to an eruption of pimples upon the head, that had lasted a long time and left cicatrices similar to those of smallpox. At other periods, obstinate ophthalmias or violent rheumatic pains came on, during the absence of these cutaneous affections.

Several times some slight excoriations became irritated to a troublesome degree, and a simple wound of the leg confined him several months to the bed.

In 1820, in consequence of enormous and numerous boils, there came on an inflammation of the urethra more intense and more painful than usual: I found M. N. in a state of extreme prostration, accompanied with great anxiety, excited by tormenting suspicions as to the nature of that abundant and greenish discharge, in every way similar to that of intense blennorrhagia.

Knowing the constitution of the patient, I thought that this inflammation depended upon the general cause that had given rise to so many others. In fact, it yielded promptly to an antiphlogistic and derivative treatment.

I prescribed afterwards ptisans of burdock, of bitter-sweet, &c.: at a later period, the use of the hydro-sulphurous thermal waters. M. N. went successively to Cauterets, Luchon, and Arles, (near Perpignan.)

At the end of three years his general health was improved, but the inflammations of the urethra still appeared from time to time,

particularly in winter, when there was no irritation of the skin or other organ. Then he became dejected, restless, changeable, melancholy, and little capable of serious occupation.

He was strongly desirous to rid himself of these periodical discharges that empoisoned his existence. I had already employed, with success, cauterisation in some cases of inveterate blennorrhagia: I proposed the trial of it to him, with the hope of essentially modifying the mucous membrane of the urethra; he submitted to it with eagerness, and the result exceeded my hopes.

For twelve years M. N. has not perceived the least trace of these discouraging gleans, although he has travelled much and has not subjected himself to any particular diet or privations. But he very soon perceived changes much more important.

His venereal desires became more intense, more imperious; the erections assumed a new energy; the ejaculation no longer took place precipitately, as before. He is, at fifty-five, more vigorous than he was at twenty, and capable of doing habitually what he would have regarded then as an excess: this new regimen, far from diminishing his powers, appears to augment them. It is also since that epoch that he has had children.

This single cauterisation, then, produced a real revolution in the genital organs, of which the effects still continue at the end of twelve years.

In order to have a complete idea of the important change that must have taken place in the cauterised membrane, it is well to remark that M. N. has remained exposed to the same cutaneous eruptions, and that they alternate, as formerly, with ophthalmias, attacks of gout, wandering pains in the chest, abdomen, &c.; but that, since then, the urethra has not been a single time the seat of these wandering inflammations, which continue to attack all the other organs.

Thus, although the first cause acts continually upon the rest of the economy, the organ cauterised is found, for twelve years, uninfluenced by it.

Again, if we judge from the preceding cases, and especially from the general symptoms that attended these repeated inflammations of the urethra, they must have provoked diurnal pollutions, which the patient himself never suspected: this explains the new energy of the genital organs, in spite of the advanced age; the increase of vigour of the whole economy, notwithstanding the more frequent repetition of the venereal act.

In fact, the cauterisation not only put an end to the disposition to urethritis, but it also destroyed a powerful and continual cause of debility that was undermining imperceptibly the constitution of the patient, unsuspected by himself.

No. 31.

Pustular herpes of the face and chin—Urethritis not contagious—Nocturnal and diurnal pollutions—Cauterisation—Probable cure.

For the following case, I am indebted to the kindness of M. Willeaume, Surgeon in Chief of the Military Hospital of Education, of Metz.

“George G., aged thirty, baker, unmarried, given to masturbation from the age of eighteen to twenty-five, affected with pustular herpes of the face and chin, had for two months, an urethritis without infection. He has been subject, for seven or eight years to nocturnal pollutions, sometimes with, sometimes without voluptuous dreams; he reads from time to time, on going to stool, a few drops of semen, especially when he has not had any pollutions for a long time.

As soon as he falls asleep, he has erections that last all night, but he has none by day. In addition, habitual state of languor and weakness; easy digestion but moderate appetite; belly sometimes distended, sometimes contracted; sleep quite good, but headach on awaking; progressive emaciation. The patient pretends to have remarked, that his blood is more fluid and watery than formerly: he complains of pains in the chest.

Introduction morning and evening, for a quarter of an hour, of a hollow bougie into the canal; at the end of fifteen days, but little amendment, only the pollutions appear more rarely.

Slight cauterisation of the prostatic portion of the urethra; but little pain.

Since then I have not seen the patient, who lives seven leagues from this place. WILLEAUME.”

This case is doubtless very incomplete, but we may calculate upon what it contains: it is then very certain that the urethritis was not the result of an impure coition, and that it caused nocturnal and diurnal pollutions.

Thus, this is of the same nature as the preceding cases; every thing inclines us to think that the result was the same, since the patient did not return for additional advice.

No. 32.

Herpes about the genital organs—Two blennorrhagies—Nocturnal and diurnal pollutions—Twenty-four sulphurous baths—Cure.

The following case is from a student of medicine.

“At the commencement of 1824, there came on a herpetic eruption of the scrotum: it extended rapidly, and formed, about the genital parts, a zone of about four fingers in breadth. On the least departure from regimen, it assumed a reddish aspect, secreted a humour of a very strong odour, and gave rise to a troublesome itching. Baths, whey, vegetable juices, and the sulphuretted cerate, only procured me momentary solace.

In the month of June, 1824, four months after the appearance of the tetter, I contracted a gonorrhœa: the inflammation was very slight: I treated it with baths and emollient broths: I wished then to take the copaiba, but I was obliged to give it up the third day, on account of the great irritation that it caused in the digestive organs. Some days afterwards, the running diminished a good deal, but did not stop entirely: there remained an oozing of a colourless, gluey matter, forming at the opening of the glans a crust that I was obliged to take away in order to give passage to the urine.

Not knowing then the importance of that chronic discharge, I neglected to observe its character; but I recollect very well that, during defecation, the semen often escaped in abundance.

In the month of January, 1825, I contracted a second gonorrhœa, more intense than the first; very acute pains were first felt in the fossa navicularis; afterwards they became concentrated in the prostatic region. At the end of several days, the inflammation was accompanied with general reaction.

I submitted them to an absolute diet: at the end of eight days the local and general symptoms abated, and very soon the running ceased entirely.

I had almost become pleased with having had this second disease, seeing the chronic discharge that had tormented me for seven months disappear in this manner; when, in the month of February, I made mercurial frictions upon the genital parts, with the view of preventing a syphilitic affection.

These frictions caused the herpetic eruption that I had had for a year to disappear; but very soon the former running reappeared, accompanied by the following symptoms:

Itching of the anus; contraction of the sphincters; arterial beating in the inferior part of the rectum, especially whilst seated, after eating or defecation; very obstinate constipation; urine depositing, upon cooling, an infinity of small whitish flocculi, forming by their union an abundant cloud, suspended in the midst of the liquid; continual oozing of a matter similar to semen, forming a crust that closes the orifice of the urethra; seminal loss during defecation, so abundant that I could sometimes collect a nutshell full of it; nocturnal pollutions, accompanied with temporary pains, but sufficiently acute to awaken me suddenly; extreme sensibility of the canal during catheterism, very acute pain when the catheter arrives at the prostate; retina extremely sensible to the impression of light; spasmodic contraction of the inferior eyelid; same state of the adductor muscle of the thumb of the left hand; ringing in the right ear, more considerable in the evening than the morning; laborious digestion; abundant flatuosity."

At the bottom of this case, I find the following note in my hand.

"Twenty-four sulphurous baths, with an ounce, an ounce and a half, then two ounces of sulphuret of potash: at the end of two months, complete cure."

It is possible that the two gonorrhœas may have been contracted, as usual, by the action of the contagious virus; but that is not probable, since the suppression of the perineal herpes was followed by the return of the discharge.

Again, the mucous membrane must have been very susceptible, since the copaiva, given in the ordinary dose, determined, at the end of three days, a great irritation in the digestive organs. It is remarkable, also, that the withdrawal of this medicine should be followed by an evident decrease in the discharge.

This susceptibility of the mucous membranes is very common in darts affections; it explains the frequency of non-contagious inflammations of the urethra among these patients.

The disappearance of the perineal herpes was also followed by the return of the nocturnal and diurnal pollutions; but this time the irritation, more intense than ever, did not confine itself to the mucous membrane of the genito-urinary organs; it extended to that of the rectum; for the patient experienced itchings of the anus, contractions of the sphincters, and throbbings in the inferior part of the intestine. This coincidence still further confirmed me in my doubts of the contagious character of the previous runnings.

However it may be, it was that which determined me to have recourse at once to the sulphurous baths. In fact, cauterisation of the urethra would not have had any influence upon the irritation of the rectum, and the continuance of that state of the intestine would have been sufficient, probably, to keep up the pollutions. Besides, the prompt and complete cure of the patient proves that the indication had been well appreciated.

It is remarkable that it should be the fear of a venereal affection that should have again been the first cause of the most grave symptoms: this is one fact more to add to all those that I have already pointed out.

No. 33.

Tinea—Herpes—Diurnal pollutions—Sulphurous baths—Cure.

A young man, aged about thirty, travelling agent for a commercial house, affected with tinea in his infancy, and later with herpes of the perineum, came to consult me in the month of October, 1826, for diurnal pollutions that he experienced on going to stool and at the end of the emission of urine: he was constipated and felt a great heat in the rectum and bladder; he urinated often and with a very short jet; digestion was badly performed; he was tormented with wind; his head and limbs were very feeble; he slept but little and badly; he was considered as hypochondriacal.

I prescribed for him the artificial sulphurous baths whilst waiting for the season of the thermal waters. After the eighth bath, I increased by one half the quantity of the sulphuret of potash.

I did not see him again for two months, after which he came to announce to me that he was cured; he had taken a bath every two days, and had stopped after the twenty second

His countenance was open and gay; he had gained strength and flesh; all the functions were well performed.

This patient was constipated; he experienced great heat in the rectum and bladder; he urinated often, &c. Thus, the irritation was not limited to the genital organs; cauterisation could not have acted upon the intestinal mucous membrane: it was this that led me to employ immediately the sulphurous baths; their action was as prompt and efficacious as in the preceding case.

No. 34.

Lymphatic temperament—Cutaneous eruptions very varied, alternating with different affections—Habitual bad health—Hypochondriasis—Pollutions misapprehended during twenty-five years—Hydro-sulphurous baths—Cure.

M. D., of a well marked lymphatic temperament, was subject, during infancy, to chilblains and scabs of the head; he had numerous scrofulous abscesses of the neck. From puberty, his health had improved; however, he was subject to ophthalmia, pains of the ears, frequent, rebellious, and variable cutaneous affections, that alternated with pains of the throat, or chronic affections of different mucous membranes.

Married at 21, he has only known his wife; he had never given himself to masturbation; never committed excesses of any kind, unless, perhaps, the first months that followed his marriage. He has had several children, of whom three are living, but afflicted with cacochymia.

From the age of 30, there came on darts eruptions upon the face, neck, arms, legs, scrotum and perineum; sometimes acute and moist, sometimes dry and scaly, changing place with great facility; they have often been replaced by small pimples, that spread over different parts of the body, exciting intense itchings; at other times they have been succeeded by boils for whole months together. M. D. went through twenty modes of treatment to rid himself of these annoying eruptions: extracts, alteratives, purgatives, syrups, and tinctures of every kind: the whole without success, but attended with much inconvenience to the digestive organs.

Gradually his health became deranged in a more serious manner; he experienced, successively, symptoms of pulmonary catarrh, of gastro-enteritis and chronic cystitis: he was subject to frequent rheumatismal pains.

He was also tormented by an obstinate constipation, that alternated with diarrhœa. His digestion became gradually deranged; he became subject to very frequent windy colics. His abdomen was always distended with wind: he was obliged to pass it as soon as it presented itself, else he was sure to be ill. When these colics seized him, he appeared to be on the point of suffocation; the blood rushed to the head; the face became livid; then the whole went off with an explosion of flatuosities that lasted several hours.

He often affirmed that he felt these winds running between skin and flesh; when he was unable to rid himself of them.

From that period he ceased to go into company, and only saw some very intimate friends; gradually he became hypochondriac and humourous. An excellent young man at heart, he was often censorious and peevish: in other respects, of a great weakness of character, and very exalted sensibility. A story of interest, the recital of a feat of courage or self devotion, caused him to weep from sympathy; then, an instant after, he appeared excessively susceptible, especially to whatever appeared to him to be an act of injustice, a neglect of duty.

His countenance was often injected: he complained of frequent dizziness, against which they had employed leeches to the anus, foot baths, &c., the whole without success.

At length his limbs grew weak; he was forced to give up his frequent walks, from which he formerly derived benefit.

These symptoms were regarded as imminent indications of apoplexy. They wished to apply leeches again to the anus; but the patient refused, because he had never been benefited by them.

It was under these circumstances that I was called; the patient was then 56 years of age.

I was unable, for several days, to discover the true cause of these various symptoms, so long was the history of all these diseases, and so complicated the language of the patient. At length he spoke of a dartre that had covered the whole scrotum, and extended to the perineum and margin of the anus. I asked him, then, if he had never experienced seminal losses on going to stool.

I ascertained, very soon, by the detail into which he entered, that he had been subject to them about twenty-five years, without suspecting them. He had always thought them mucosities or glairy matters, and had never attached any importance to them. Besides, these losses were not habitual, nor equally abundant: he was often exempt from them for several months. As well as he could recollect, it was especially when he was tormented by cutaneous eruptions, that he was free from them; he thought, even, that they were his humours that were passing off by his urine, whenever he saw these spermatic evacuations re-appear: he experienced, at those times, heat and irritation in the rectum and bladder, that he could only allay by injections.

Since the appearance of these losses, his erections and venereal desires had been continually diminishing; he had not had any for several years, which he attributed, simply, to the progress of age.

His urine was sometimes troubled or flocculent for twelve or fifteen days; then it became limpid for an uncertain period.

All these circumstances were too clear to leave the least doubt as to the nature of the disease. I induced the patient to take some natural hydro-sulphurous waters: he went to those of Vernet, near to Perpignan.

After seven or eight baths, there came on intense itching of the

skin, especially of the legs; a multitude of small pimples became developed there, that oozed out, for a month, such a quantity of reddish serosity, that the patient was obliged to envelope the limbs, twice a day, with several thicknesses of linen. At length this discharge diminished gradually; the epidermis became detached in flakes over the whole surface of the body.

During this time a complete metamorphosis took place in the whole economy: the stools became easy and regular; the appetite increased rapidly; the seminal losses disappeared; the stomach digested, indiscriminately, all kinds of food, and bore the strongest wines: the erections re-appeared: in a word, M. D. experienced, at 56, a real return of youth.

Here are, then, seminal losses that for twenty-five years were misunderstood; and during all that time the unfortunate subject of them passed for an imaginary sick man, a hypochondriac; they ridiculed his mania for injections, drugs, &c., without taking pains to ascertain the cause of it. I hope that serious attention will be given to these long sufferings: if they do not always terminate in death, they at least empoison life.

How did this patient so long endure this disease? Because it was not continuous. The seminal losses first took place, probably, only when the irritation became seated upon the genito-urinary organs, or upon the rectum.

At last, however, they resulted in seriously endangering his life, and all began to believe in the existence of a cerebral affection, or, at least, in indications of apoplexy.

No. 35.

Pimples of the face—Dartre of the anus—Repeated gonorrhœas.

Here are some passages from a very long case, of which I have not been able to find the result.

“The acrimony of my blood manifested itself early, by numerous and suppurating pimples of the face.

“At 18, they disappeared, in consequence of a journey, and were replaced by a violent dartre of the anus.

“At 21, after several balls, there came on a running of some drops of but slightly coloured matter; M. Cullerier told me that it was only in consequence of becoming heated: it went off at the end of twenty days. That fatal running has been, however, the source of all my troubles. When it had disappeared, I felt acute pains in the canal and bladder; they became redoubled, and lasted an hour or two after I had urinated.

“Several physicians attributed them to a dartrous humour seated upon the neck of the bladder and canal. M. Dubois prescribed baths for me, vegetable juices, sulphuretted preparations, and a strict regimen, which ameliorated my condition. Some months after, I saw a woman. Eight days after, I had another running

more violent than the first, accompanied with acute pains, with inflammation of the testicle, and with a return of the *élanemens*. For a year, I took successively about a pound of strong mercurial ointment; nine bottles of the extract *de L'affecteur*; an enormous quantity of sarsaparilla; then two bottles of the liquor of Van Swieten, without being able to cure my running, and without seeing the eruption about the anus diminish. A year afterwards, I put a blister upon the arm, which did me a great deal of good.

"At 31, after having had connection, during the whole winter, with the same woman, there came on in the spring a third running, similar to the preceding. This, I was certain, was not owing to a new infection." * * * *

I thought it important to report this fragment of a case, as a new example of the influence of the darts eruptions upon the mucous membrane of the urethra, the bladder and rectum.

We see here, again, the disposition obstinately to combat these discharges by all known anti-venereal remedies.

These errors are so grave and so frequent, that I am not willing to neglect any opportunity of mentioning them.

No. 36.

Periodical tetter—Blennorrhagia—Acute pericarditis, caused by the nitrate of potash—Relapse owing to sudorifics, &c.

M. S., of a nervous temperament, experienced, from youth; a slight herpetic eruption, the return of which took place periodically every winter.

At 32, greenish discharge, in consequence of a suspicious coition; emollient drinks, to which M. S. adds a great quantity of nitrate of potash: in three days he consumes an ounce of it. From that moment, symptoms of inflammation of the bladder, urine very frequent and bloody; then purulent and infectious; acute pain; weight in the prostatic region. (Repeated leeches, bath, blisters, &c.) No change.

Remarkable amelioration produced by the copaiba; but diarrhœa, eruption of pimples and boils, with pulmonary catarrh, succeeded.

After the administration of the syrup of Cuisinier, and of the decoction of sarsaparilla, return of the vesical symptoms; irritation of the genital organs, diurnal pollutions, spasmodic contractions of the canal resembling a stricture. Cauterisation without success, sulphurous baths; sensible amendment.

Having lost sight of this patient, I was unable to learn how this affection of the genito-urinary organs terminated; but I thought it necessary to mention here the principal circumstances of this case, on account of the deplorable effects produced by the nitrate of potash, and the relapse caused by sudorifics.

No. 37.

Hereditary tetter—Gastro-enteritis—Cystitis—Itching of the anus—
Pollutions.

M. P., given to masturbation at the epoch of puberty, experienced, two years after, an herpetic eruption, hereditary in his family; it was combated for six weeks by purgatives administered every other day; the tetter disappeared, but was replaced by a gastro-intestinal inflammation, that diminished as soon as the tetter re-appeared.

The year following, the use of the same purgatives brought on a return of the same troubles. The use of the waters of Bourbonne was followed by nocturnal pollutions, which diminished when the eruption became extended to the face and arms. After the trial of cress and the depurantia, there came on seminal losses on going to stool, itching of the anus, urine troubled, depositing a sediment, and excessive emaciation.

I advised this patient to use the hydro-sulphurous thermal waters, in all their forms, and particularly the ascending douches, on account of the itching that he experienced in the anus. I have heard nothing more from him; but the case appeared to me worthy of preservation.

We see here, at two different times, that purgatives repel the tetter, but bring on a gastro enteritis; and that the return of the herpetic affection eventually establishes the health: still later, pollutions are excited by the use of the waters of Bourbonne: they diminish under the influence of a new herpetic eruption, and are finally exasperated in a remarkable manner by the cress and depuratives.

When shall we take into consideration the peculiar constitution of each patient, the susceptibility of his different organs, and the action of medicines upon each of them?

Causes. These cases are sufficient to prove the close connection that exists between the genito-urinary mucous membranes and the skin, especially with that of the scrotum and perineum (Nos. 32, 33, 34).

These relations are not more intimate or more special than with other membranes of the same nature; they depend upon the same cause, the analogy of structure, and functions of the mucous and cutaneous tissues; in several of the cases that I have just reported, the genito-urinary organs have even been the last affected (Nos. 29, 30, 36); the law is then general; but the question here is only in reference to seminal losses.

However, the cutaneous affections have not alone assisted in their production: I have already said that the causes of pollution rarely act in an isolated manner, as it is necessary to suppose when

we study their influence: we must then consider all the important circumstances that have contributed to this unhappy result.

I have reported, in the preceding chapter, numerous examples of blennorrhagiæ complicated with herpetic affections that it was necessary to combat with special remedies (Nos. 22, 24).

In the greater number of the cases which we have just read, there existed runnings more or less abundant, more or less often repeated (Nos. 30, 31, 32, 34, 35). It may appear improper that I should separate cases so strongly resembling each other, but I have been determined in so doing by the predominating character of one or the other disease.

I have arranged, moreover, among the cutaneous affections, the cases in which it was not demonstrated to me that the running was the result of an infection. It is sufficient, in order to remove all doubts on this point, to examine with a little attention the circumstances under which these discharges developed themselves, with what facility they have been reproduced, what resistance they have opposed to the ordinary methods of treatment, and with what promptitude they have yielded to the sulphurous baths.

There is certainly no reason why an individual afflicted with cutaneous affections should not be exposed to the action of the blennorrhagic virus, and, on the contrary, there are many why he should be more easily infected; but too generally we confound the runnings, to which such persons are disposed, with ordinary blennorrhagia, or, to speak more exactly, we never think of questioning patients on this point, and if they speak of old cutaneous affections that disappeared at the same time, we ridicule them, without stopping to consider their importance; we prescribe the anti-blennorrhagic remedy that we have invented or adopted for all cases. It is not empirics only who act thus, but practitioners of good standing and well informed, who have not reflected upon these particular cases, sufficiently common, however, to merit a serious attention.

One of my friends, annoyed for a long time by prurigo, that he took to be the itch, had recourse, in order to rid himself of it, to an empiric, who anointed the whole body. Scarcely was he cured, when he brought to a termination an affair of gallantry about which he had been for a long time engaged. Some days afterwards, he had an abundant and greenish discharge, accompanied with pains, and all the symptoms of a violent blennorrhagia. I did not hastily adopt his suspicions; I caused him to be covered with flannel from head to foot: at the end of a few days the vesicles reappeared, and the discharge subsided of itself.

I have at this moment under treatment a patient who, at 14, had pityriasis of the head: it disappeared at 19, and was replaced by a chronic inflammation of the pulmonary mucous membrane. After the cure of this catarrh, there appeared, without any known cause, a pain at the neck of the bladder, accompanied with itchings, darting pains like to thrusts of a lancet, and weight in the rectum: then succeeded a gleet; the spermatic cords became swelled and painful,

as well as the testicles, and the patient now has diurnal pollutions, with all the difficulties consequent upon it.

I find the following in a letter of consultation that I have lately received :

"Having had the itch at 10 years of age, and at a later period, dartrous eruptions of the face, neck, &c., up to the present time I have not seen any women. Yet at 18, the following day, after having read an obscene book that heated my imagination, I was seized with a swelling of the testicles, of such a character that we were obliged to resort to bleeding, baths, and emollient cataplasms to combat the inflammation.

"Two years afterwards, having sought to obtain the favours of a young person, without being able to succeed, I experienced the next day a copious discharge of greenish matter, that lasted nearly nine months, without acute pains, but of such an acid nature, *qu'elle brulait mes chemises.*"

After such facts, it is right to look twice before pronouncing upon the nature of a discharge attacking an individual afflicted with cutaneous disease; especially when its suppression has already been followed by inflammation of some other mucous membrane.

We must recollect, however, that these patients, like others, are exposed to the blennorrhagic infections, and that it must have with them even a more peculiar character of virulence and obstinacy. It must then favour a good deal the disposition that these cutaneous affections have to become concentrated upon the genito-urinary organs, and to provoke seminal losses.

Again, we find here, as in the preceding chapter, anti-venereal remedies that are useless, excessive, and injurious. In one case, mercurial frictions, used to prevent a syphilitic affection, dispel some dartrous eruptions, and are followed by the most serious consequences (No. 32); in another, external and internal remedies, violent and repeated, are employed without any better motive or success (No. 35): finally, sudorifics, the syrups of Cuisinier, &c., bring on an unlucky relapse (No. 36).

Nitrate of potash, taken in large doses, determined an acute cystitis (No. 36). With another patient purgatives dispelled an hereditary dartre; the waters of Bourbonne brought on pollutions; cress and depuratives caused cystitis and increased the seminal losses (No. 37).

These diverse methods of treatment acted either by suppressing suddenly a cutaneous eruption, or by exciting direct irritation of the genito-urinary organs. In every case they have powerfully assisted in the production of seminal losses.

Mode of action.—In what manner do cutaneous affections act in producing pollutions?

It is sufficient to cast the eye over the cases that I have just reported, to see that they have acted by being transferred to the mucous membrane of the genito-urinary organs.

Thus these patients experienced inflammations of the urethra, repeated a greater or less number of times (Nos. 30, 31, 32, 35, 36); acute cystitis (Nos. 36, 37), or chronic (Nos. 29, 32); vivid irritation of the bladder (Nos. 33, 35); inflammations of the testicles (No. 29), of the prostate (Nos. 32, 36); and pains in the spermatic cords.

We find then, in these patients, the same symptoms as among those whose pollutions were owing to contagious urethritis. Thus, the metastasis of these cutaneous affections to the urethral mucous membrane has produced the same effects as the blennorrhagic virus. The irritation must have extended itself in the same manner along the spermatic ducts.

Irritation of the rectum.—But several of these patients experienced phenomena in the region of the rectum that have not been observed in any case in the preceding chapters; these consisted in great heat, dartings, itchings, and throbbings, extending to a greater or less height into the intestine (Nos. 32, 33, 34, 35).

These symptoms indicate that the dartrous affection had extended to the mucous membrane of the rectum, as well as to that of the genito-urinary organs. This complication must have had a powerful influence in the production of seminal losses, by provoking an obstruction of the sphincters and a spasmodic contraction of the rectum; hence would result an obstacle to the passage of the fecal matters, and a disposition also to a contraction of the vesiculæ seminales.

I shall return very soon to the causes of pollutions having their seat in the rectum: In the mean time I will only observe that these symptoms ought not to be confounded with those excited by the irritation of the prostate.

In both cases there may be constipation, feeling of weight, heat and uneasiness in the rectum; but when these symptoms arise from a dartrous affection, there are superadded intolerable itchings, accompanied with burning sensations at the margin of the anus: if we examine these parts, we find them red, excoriated, and humid: separating the folds of the skin, we find oozing out a mucous and sometimes purulent matter; the portions of the mucous membrane that the eye can perceive are in the same state: in a word, the margin of the anus bears unequivocal traces of a dartrous affection.

This distinction is important to be established, because, in the first case, cauterisation of the prostatic portion of the urethra may stop the chronic inflammation of which this part is the seat, and with it the symptoms that depend upon it: in the second, the symptoms that have their seat in the rectum are owing to a peculiar affection of the mucous membrane. It is true that this affection is similar to that of the urethra, and that it is dependent upon the same cause; but the cure of the urethral inflammation would not have any influence upon that of the rectum, and we shall see that this last is sufficient to excite or keep up seminal losses capable of materially affecting the health.

Treatment.—The only means that have been employed with success in cases of this nature, are cauterisation and the sulphurous waters.

CHAPTER V.

RECTUM.

In the preceding chapters I have explained the causes that may produce an influence upon the spermatic organs, through the medium of the mucous membrane of the urethra: I am now going to investigate such as may act upon the vesiculæ seminales by way of the rectum.

No. 38.

Seminal losses from mechanical obstacle to defecation—Incision of the obstacle—Prompt and complete cure.

Nicholas G., of a strong constitution, *conducteur de diligence*, had at twenty-five years of age, a chancre, some warts, and a bubo. Without ceasing from business, he treated this violent syphilis with the sublimate in solution and mercurial pills. Notwithstanding the fatigue caused by repeated journeys, all these symptoms disappeared at the end of six weeks. But a short time afterwards, he experienced some difficulty in defecation; this difficulty gradually increased, so that for four or five years this function could only be performed by means of considerable efforts; the fecal matters were passed flattened like a riband from four to five lines in breadth, by one in thickness.

From that time the health of Nicholas G. became gradually deranged: his appetite diminished; his digestion became laborious and accompanied with a great quantity of wind; emaciation and weakness increased from day to day; there was a loss of memory; and the functions of the genital organs underwent the same changes. When I saw the patient, the venereal desires were almost null; the erections remained incomplete; the penis no longer acquired the same development and the same firmness as formerly; coition could take place but very seldom, and the ejaculation was a long time delayed; sometimes even it was impossible, and never accompanied with any vivid pleasure.

The union of all these symptoms could not fail to make me suspect the existence of seminal losses. In fact, the patient informed me that, for four years, he had invariably passed semen at stool, and that this evacuation was, in general, in proportion to the efforts that he was obliged to make in order to expel the fecal matters: also that, in order to preserve them in a loose state, he had confined himself to a vegetable and milk diet. He had tried very often to take injections, but had never been able to succeed.

These abundant losses had so exhausted the patient, that he appeared to be sixty years of age, although but thirty-four.

I encountered, at two inches from the orifice of the anus, a stricture half a line in thickness, nearly circular, having an irregular opening in the centre that would only admit the extremity of the index finger. It was a kind of diaphragm that opposed the discharge of the fecal matters. This membrane was thin, flexible, and indolent: it was evidently a cicatrix.

I divided it crucially with a straight probe-pointed bistoury, that I introduced flat along the index finger. These incisions were of but little extent, but I enlarged them by introducing the finger deep and by pressing strongly in the direction of each wound, until the rupture of the membrane reached the wall of the intestine. Four flaps were thus formed, the reunion of which I took care to prevent by the frequent introduction of the finger.

This operation gave but little pain and caused only a trifling loss of blood. I taught the patient to introduce into the rectum a rod of box wood, of a size sufficient to dilate the incised membrane: I recommended him to introduce it as far as possible, to leave it but a short time in a place, but to renew its application several times a day.

The employment of this simple means was sufficient to procure the separate cicatrization of these four flaps. From that moment the expulsion of the fecal matters took place without difficulty, no longer causing any seminal loss, and all the functions soon resumed their normal state, although Nicholas G. had again commenced his employment as *conducteur*.

This case gives a clear idea of the influence that constipation may have upon the production of seminal losses during defecation.

Here the only cause of the disease was the membranous obstacle situate above the sphincters: the escape of the semen must have been caused by the mechanical pressure exercised by the intestine upon the vesiculæ seminales, during the violent efforts that the patient was obliged to make, in order to force the fecal matter through a narrow opening. As soon as this barrier was destroyed, the seminal losses ceased, and with them all the symptoms consequent upon them.

The effects of the compression, wholly mechanical, of the vesiculæ seminales by the rectum, manifest themselves then, in a perfectly isolated and altogether incontestable manner, which is more rare than we are apt to believe it to be.

Coition was very long; the ejaculation much retarded; sometimes, indeed, it was utterly impossible, and was never accompanied with any very vivid pleasure, because the vesiculæ seminales contained but little badly elaborated semen: but they were not irritated; the ejaculatory ducts were neither weakened nor relaxed. In almost all cases of diurnal pollution, the ejaculation is, on the con-

trary, very rapid, because the spermatic organs are irritated or relaxed, if both these states do not exist at the same time.

No. 39.

Seminal losses brought on by a chronic diarrhœa—Kept up afterwards by a mechanical obstacle to defecation—Ablation of the scirrhus tumour of the anus—Prompt and entire cure.

M., of a strong constitution, entered the military service at 17; was in actual service during his 18th year, consequently had to undergo many sufferings and privations: he committed excesses also of every kind. His health however underwent no alteration.

In 1814, M., aged 35, contracted a blennorrhœgia that he neglected; the discharge diminished, but did not disappear entirely till 1816, the period at which M. retired from service and led a regular life.

In 1820, M. married, and became discreet in the enjoyment of its privileges. But, having become porter of a club, he passed a great many nights almost without sleep. In 1824, he was suddenly seized with severe colics, that decreased much under the influence of emollient injections, repeated baths and a strict regimen, but did not entirely disappear.

Two years afterwards, he had a severe hemorrhage from the large intestine, accompanied with a very painful tenesmus, and he remarked that he passed semen during the violent efforts of defecation.

This hemorrhage allayed the pains: but a dysentery remained, that kept up the tenesmus, as well as the seminal losses, and forced out several hemorrhoidal tumours, inverting the mucous membrane of the rectum. From that time the health of M. became more and more deranged: he lost his gaiety and activity, ceased to feel venereal desires, and felt his sight growing weak at the same time with his memory and his physical powers: finally, in 1827, he found himself compelled to give up his occupation as porter.

In 1827 and 1828, the dysentery diminished in intensity: in 1829, it became intermittent and rare: finally, in 1830, it was replaced by a most obstinate constipation, that became in its turn the cause of seminal losses, and increased the swelling formed by the rectum and some hemorrhoidal tumours. This swelling became irreducible, hardened and irritated by the friction, and finally assumed a scirrhus character. Its presence alone was an obstacle to defecation.

M. entered the hospital Saint Eloy the 28th March, 1831, in the following state:

Aged 51; extreme emaciation; face pale and yellowish; skin hairy, hair black; excessive weakness; very great excitability; profound melancholy; habitual hypochondriasis; digestion painful especially after the use of animal substances; defecation obstructed by a red hard border five or six lines thick at its base, projecting an

inch and occupying half the circumference of the anus : seminal losses during the efforts necessary for the expulsion of the fecal matter : emission of urine followed by the discharge of a glairy, limpid and stringy matter : no erections for a long time : absence of all venereal desire ; *frequent vertigo*, blindness and ringing in the ears ; flashes of heat over the head from the least cause.

The border of which I have spoken nearly resembled a large cock's crest ; remains of old hemorrhoidal tumours existed in its neighbourhood : it was then caused by the escape of internal hemorrhoids, that had dragged out a portion of the mucous membrane of the rectum ; the contraction of the sphincters had opposed its return and increased the tumefaction ; the friction had provoked the repeated inflammation of this tissue, and its degeneration.

The base of it occupied more than half the circumference of the anus, and extended above the sphincters ; it was six lines thick ; its consistence was schirrous : there exuded from its surface a sanies of a well marked cancerous odour ; some points had even begun to ulcerate ; it was evident that there was no time to lose, if we wished to remove this tumour : the patient had determined to be operated upon, and with this intention he had even addressed several distinguished practitioners ; but they refused to undertake it on account of the depth to which the disease had extended.

By exercising a slow and gradual traction upon the tumour, I saw that I could draw out the healthy portions of the mucous membrane, and consequently could remove the whole of the disease : as to the hemorrhage, I thought it would be easy to arrest it by cauterising the parts, as they were divided.

The 25th of March, having drawn out beyond the sphincters, the base of the tumour, I commenced its removal by an incision practised upon the healthy mucous membrane, and I cauterised immediately the bottom of the wound with a hot iron, thin and rounded ; then I dissected the base of the tumour, proceeding with the deepest parts, and cauterised them as they were exposed, before a new dissection should allow them to retract above the sphincters, making use of the parts not yet separated, to retain the bleeding surface within sight. After the entire removal of the tumour, the greater part of this wound, charred by the hot iron, ascended between the sphincters and even much above them.

After some inflammatory symptoms, combated by bleeding, baths, emollient drinks, &c., suppuration took place : the recent swelling of the inguinal glands disappeared, and cicatrisation gradually took place, without accident.

I have only to remark, that during the first days the patient could not empty the bladder without the assistance of the catheter, and that for some time afterwards he urinated very frequently.

The 1st of May, the cicatrix was almost formed ; the fecal matters had resumed their ordinary consistence, and were passed every day with facility ; for a long time their expulsion had not occasioned any seminal losses : the patient had resumed his gaiety

and his energy, his appetite had returned, and digestion was performed with facility: his strength and embonpoint increased daily.

About the middle of the month, the erections re-appeared during the night; they became afterwards more and more frequent and prolonged; the cerebral functions followed the same progress in their re-establishment; the blindness and congestions disappeared, and M. left the hospital the 24th of May completely cured.

Three years afterwards, being at Clermont as president of the medical jury, I received the visit of M. He expressed his gratitude to me some time before I could recognise him; the history of his operation could hardly set me right, so much had his countenance, radiant and animated, changed its expression. I need not say, that he had resumed his conjugal habits and his service as porter.

The cicatrix of the anus was then pliant, and in no way interfered with defecation.

The last part of this resembles exactly the preceding.

The results of this operation abundantly prove, that the seminal losses were, for a long time, only kept up by a mechanical obstacle to the expulsion of the fecal matter. But the diarrhœa that had caused the escape of the hemorrhoids and the development of the schirrous tumour, was also accompanied with frequent seminal losses.

At that period, the vesiculæ could not be compressed by the fecal matters, that were liquid and remained barely a few minutes in the rectum: the seminal losses that took place during defecation, could not be owing to the mechanical compression of the reservoirs of the semen, we must then of necessity admit that the vesiculæ seminales participate in the irritation of the rectum; that they contract at the same time with it, and that they are influenced by the tenesmus caused by the arrival of the fecal matters into its cavity.

This case then presents us with a remarkable instance of the double influence that the rectum exercises over the vesiculæ seminales: of a nature essentially vital at the commencement, it became at length purely mechanical. These two orders of phenomena produced the same results; but they were sufficiently distinct not to be confounded one with the other. It is not so in many cases where their simultaneous action has not been well appreciated.

It is also remarkable, that the patient should have been unable to empty the bladder for several days after the operation, and that at a later period he should have experienced a frequent desire to urinate.

These two phenomena prove the close connection that exists between the margin of the anus and the neck of the bladder. This case appears destined, then, in all its bearings, to demonstrate the influence of the rectum upon the genito-urinary organs.

No. 40.

Hemorrhoids from the age of puberty—At the age of 28, obstacles to defecation—Pollutions—Cure.

M. A., of a sanguineous temperament, of an ardent disposition, at the age of 15 indulged for some time in masturbation: very soon afterwards he had an hemorrhoidal flux, which he regarded as a consequence of this fatal passion, and gradually corrected himself of it before his health had become deranged by it; but his piles tormented him a great deal, especially when he became a soldier. They diminished, however, after a campaign in Spain, where the patient suffered much from the heat.

Having returned home, and begun to lead a less active life, he thought that by care he should be able to rid himself of them, but the reverse took place: being better nourished, and leading a sedentary life, he found his hemorrhoids increased both in number and volume. Every stool was followed by a more or less copious loss of blood; the tumours that existed above the sphincters came down, and formed externally a tender voluminous border, that could only be returned by means of slow and continuous pressure.

At length these hemorrhoidal tumours, irritated and swollen, became an obstacle to the escape of the fecal matters. A still greater quantity of intestine appeared externally, and returned with still greater difficulty. From that time the patient perceived that, in the efforts of defecation, he often lost a greater or less quantity of semen. His health gradually declined in a sensible manner: he grew weak; his digestion became deranged; his sleep became disturbed, and fatiguing rather than refreshing: his disposition became soured; he often experienced confusion of the senses and vertigo, and sometimes syncope.

At first, emollient injections, baths, and demulcents, appeared to be of some service to him; but he very soon perceived that they increased the relaxation of the parts and favoured the prolapsus of the rectum, and the seminal evacuations.

This state of things had lasted more than four months when he came to consult me. He was only 28 years of age, but appeared to be 40; his muscles were well developed, yet he was without strength or energy.

At first I soothed the irritation with injections of the decoction of poppy-heads. A few days afterwards I caused injections to be made into the rectum with the poplar ointment, then some more stimulating, of balsam; at the same time, I administered internally cinchona and chalybeates.

Gradually the mucous membrane assumed more tone, and became disengorged; the hemorrhoids became less sensitive and less voluminous; indeed the greater part eventually wasted away; the prolapsus of the rectum at first diminished, and then disappeared. The seminal losses continued to decrease, and also the symptoms dependent upon them.

This case resembles a good deal the preceding; only the prolapsus of the intestine could always be completely reduced; the hemorrhoids also had not yet become degenerated; it was, however, the commencement of the same disease, and had already begun to produce the same effects. The obstacle to the evacuation of the fecal matters caused seminal losses during four months, which were beginning to affect the constitution.

It is rare to see hemorrhoids supervene at the age of 15; I cannot, however, believe with the patient, that onanism alone caused their development: it is probable that there existed in him a strong predisposition to hemorrhoids. I do not even suppose that his temporary misconduct in boyhood had any influence in producing his seminal discharges, so long a time had elapsed between these two periods; besides it was easy to account for the appearance and cessation of these pollutions, without it being necessary to go back to such remote causes. We must then regard this case as a new example of the influence that obstacles which prevent the expulsion of the fecal matters may have upon the vesiculæ seminales.

No. 41.

Precocious hemorrhoids—Hæmaturia—Cerebral symptoms.

I find among my notes a consultation letter recently received, of which I must here relate the principal circumstances.

M., of a nervoso-sanguineous temperament, having a fair skin and florid countenance, passed from college into the office of a notary, and continued to lead a very sedentary life. From his youth, he had been affected with piles, which easily gave rise to copious evacuations of blood. Of a sensitive and even timid character, he has never experienced any very strong passion, nor committed any excess, unless it be in the labours of the study. He has never had any children, although he has been married for 20 years.

In the summer of 1819, having made a long journey on foot, he experienced the first attacks of hæmaturia, which have often returned since that time, whenever he has taken a moderately long walk: There came on also very soon a frequent desire to urinate; his urine, often troubled, was not however bloody, except after exercise.

From that time, the patient became still more sedentary, and his strength progressively diminished. One day, while at church, he fell into a state of syncope, attended with an entire loss of his senses, but he very soon came to himself again, and was able to return home on foot without manifesting the least appearance of paralysis in one part more than in another.

He afterwards experienced many similar, though less severe attacks; being for the most part confined to a sinking away of the limbs under the weight of the body, without being accompanied with a complete loss of semen. One day, he was seized whilst

writing, with a sort of numbness of the fingers of the right hand, which prevented him from finishing his sentence. On another occasion, the thumb of the same hand became stiff, and again prevented the patient from writing. But these accidents were always of short duration, and produced no other results: the right side of the body never retained any permanent trace of paralysis which could lead to the supposition that it was more affected than the other.

In consequence of a slight diarrhœa, blood was discharged per anum in a greater quantity than usual; this evacuation put an end to the hæmaturia for a whole winter: the urine only continued to be more frequently passed than in health.

It was also observed that the mind and memory of the patient grew weak in the same proportion with his muscular powers.

The following year, in the month of May, the patient was found stretched upon the floor in his study: his intellect was much confused; he only replied in incoherent and badly articulated words. A large venesection was practised and leeches were applied to the neck: the patient was able the same day to get up and pass several hours in his arm chair.

Since that time his intellectual faculties have remained almost completely extinguished: he no longer thinks of his office as notary, for which he had formerly a sort of passion; and he is insensible to the attentions of his wife whom he had dearly loved, and to the interest manifested by his best friends. Morose and taciturn, his only replies are yes or no, when his clerks wish to speak to him about business: if he endeavours to say more, he becomes confused and altogether unintelligible.

Although he was formerly remarkably neat in his person, he now passes his urine and fæces in his clothes.

The legs and arms are feeble but are equally free.

The practitioner who addressed this letter to me did not doubt that there existed a chronic cerebral affection: he only wished to learn my opinion as to its nature, and the means for remedying it: this prepossession is evident also from the manner in which the facts are presented. They did not however appear to me decisive, and I urged my brother physician to direct his attention to the condition of the spermatie organs, informing him of the reasons that led me to suspect diurnal pollutions.

These ideas must have appeared very strange to him, for he never replied to them; which, for the sake of getting at the truth, I very much regret.

Now that I have just been obliged to review many cases of this kind, I am convinced that I was not mistaken; but all discussion upon this point would be useless. I only desire that this case be compared with those preceding it, and with another that I am going to report (No. 44); and that Nos. 1, 2, and 20 be again read.

However it may be, this patient, like the last, was subject to piles

from his youth, which indicates an uncommon predisposition to this disease. There existed an intimate connection between the mucous membrane of the rectum and that of the bladder, since the patient had frequent hæmaturia when his hemorrhoids bled but little; for he ceased urinating blood all one winter, in consequence of an unusually large hemorrhoidal flux.

I regret very strongly at this time that I did not sooner think of studying the influence hemorrhoids have in producing seminal losses. I am persuaded that it must be very powerful and very common, not only on account of the obstacle that hemorrhoidal tumours present to defecation, but also from the intimate connection of the verge of the anus and inferior part of the rectum with the prostate, bladder, and vesiculæ seminales; a connection which is reciprocal, and of which I shall very soon give numerous and striking proofs.

The character, habits, &c., of hemorrhoidal subjects, the control that this disease exercises over their minds and actions, all lead me to believe that with them it ought to be looked upon as a matter of more importance than simply a mass of tumefied capillary vessels. What confirms me still more in this opinion is, that I have never seen the same disease produce in woman the same serious consequences.

But I shall advert to this subject again: in the mean time, I refer all to the excellent treatise of Montègre.¹

No. 42.

Scrotal dartre—Hemorrhoids—Blennorrhagiæ—Difficulty in urinating—Fifteen cauterisations—Anti-venereal and anti-dartrous treatment, blisters, iodine, meager diet, &c., without success—Incision of a fissure of the anus—free emission of urine, &c.—Prompt cure.

Paul B., of Marseilles, master packer, aged thirty-four; robust, of a bilious-sanguineous temperament, had had hemorrhoidal tumours for six years, when he contracted three blennorrhagiæ in a short space of time: the last was followed by difficulty in the emission of urine; it could only be passed drop by drop, accompanied with acute pain.

Several practitioners, consulted in succession, thought they recognised the presence of a stricture in the urethra, and in consequence practised fifteen cauterisations at intervals more or less remote from each other. The patient not experiencing any improvement from them, was submitted to a very long and complicated anti-venereal treatment, without any better effects.

It was then thought that the obstacle to the escape of the urine might have some connection with a dartrous affection of the scrotum that had disappeared without any known cause: with this view they administered all the usual remedies for this affection:

¹ Des hémorrhoides. Paris, 1819.

blisters were applied to the thighs with the hope of recalling the cutaneous eruption: these means, like all the others, produced no beneficial effects.

The patient could not urinate without the assistance of the catheter: he experienced pains near the neck of the bladder, and a sensation of weight in the rectum; he suffered much in going to stool; and the expulsion of the fecal matters took place only by means of laborious and long continued efforts. Another physician, having introduced a catheter with the greatest facility into the bladder, attributed all the symptoms to a schirrous engorgement of the prostate, of the size of a hen's egg. (Venesection from the arm; three applications of leeches to the perineum; meager diet, composed of biscuit, dry figs, and milk.)

The object of this treatment was to diminish the volume of the prostate by the emaciation of all the organs. It appeared to produce some amendment in the symptoms; but this disappeared as soon as the patient gave up this severe regimen; which the physician attributes, in the document expressing his opinion, to the return of the engorgement of the prostate, in consequence of the return of the embonpoint.

Be it as it may, the patient experienced the same pains in the anus and at the neck of the bladder: it appeared to him that these parts were bound as with a grapple that prevented the passage of the fecal matters and urine. (Preparations of iodine in frictions and internally.) No change.

The 15th of June, 1830, four distinguished practitioners were agreed in consultation, upon regarding it as a cancerous affection of the prostate, and only prescribed palliatives. A short time afterwards, the patient finding his sufferings increasing, came to Montpellier.

I found him pale, emaciated, and in a state of extreme physical as well as mental weakness; he presented all the symptoms of profound hypochondriasis. I introduced a catheter into the bladder with the greatest facility, and found nothing extraordinary in the size of the prostate; I observed only that there existed upon the surface of the rectum several soft, irregular, and movable tumours, which I regarded as internal hemorrhoids, and that the more as there existed others between the sphincters and the verge of the anus.

But these hemorrhoids were not sufficient to explain the extreme difficulty in defecation, and the inability of the patient to pass his urine without the aid of the catheter, &c. I examined the prostate then several times, and I still remained convinced that it presented nothing extraordinary in its volume, form, or consistency.

At length, at the end of six days of unsatisfactory research, I discovered a fissure of the anus, the visible part of which terminated in a fold of the mucous membrane, concealed between two hemorrhoids.

Without pretending to explain, by this fissure, all the symptoms

observed during three years, I thought it necessary to begin by removing it; the patient eagerly consented to it, and I performed, upon the instant, the section of the sphincters.

Some hours after the operation, the patient had a copious stool, and, what is very remarkable, he emptied his bladder entirely, without experiencing the least difficulty or the slightest pain. The next day he had three equally easy stools, and the emission of urine took place, as the day before, without the assistance of the catheter.

From that time, all the functions were performed with facility and regularity: cicatrisation took place in a few days, and the strength was soon re-established. When M. B. departed for Marseilles, a remarkable change had already taken place both in his physical and moral condition.

On reviewing this case, I am convinced that this patient experienced seminal losses on going to stool, and that it was to them that the weakness, hypochondriasis, &c. ought to have been attributed. But no mention is made of them in my notes, and I am unwilling to add any thing to them.

Omitting this, the case is still very remarkable. It is impossible not to attribute to the fissure of the anus all the symptoms observed for three years in the region of the urinary passages, when we find the division of the sphincters followed by the cessation of the pains referred to the neck of the bladder, and by the free and easy emission of the urine.

It is rare that this connection between the margin of the anus and the neck of the bladder presents itself in a manner so clear and striking; but it is easy to find numerous proofs of it when we observe carefully the reciprocal influence that these organs exercise, the one upon the other. (Nos. 18 and 37.)

There did not exist in Paul B. any stricture of the canal, or any affection of the prostate when I first examined him: I do not pretend to affirm that these organs had always been in the state in which I found them; but why did the retention of urine still exist?

For six days the patient did not cease from his enquiries as to the cause of this singular phenomenon; as I could not account for it in a satisfactory manner, I always replied, I don't know, and then made a new examination. If his physicians had not been in any greater haste to admit an hypothesis, they would have examined him with more attention and perseverance, and would probably have found the fissure three years sooner.

No. 43.

Blennorrhagiæ—Constipation—Fissure of the anus—Seminal losses during defecation—Profound hypochondriasis—Inclination to murder and suicide—Diarrhœa—Spontaneous cure of the fissure, seminal losses, &c.

At 24 years of age, Felix B. contracted a blennorrhagia, attended with weight in the prostatic region; several applications of leeches

and baths calmed the pain and reduced the running to a limpid oozing.

The patient then made a journey in a carriage by the side of a young person that excited in him energetic and prolonged erections; very soon afterwards, the left testicle became enormously swollen and very painful, and the oozing from the urethra increased.

Having arrived home, the patient applied some leeches, and took many hip baths; the size of the testicle diminished, but the oozing continued.

For three or four years this testicle remained very sensitive; it swelled several times, or became very painful in consequence of venereal desires a little prolonged: the oozing from the canal was also increased by them. The influence of spring alone, caused, also, for four years, a return of the same phenomena.

To put an end to them, Felix B. took the extract (rob) of *Lafsecteur*. After the second bottle, he became obstinately constipated; very soon defecation became excessively painful, and the fecal matters were besmeared with blood. Then the patient renounced the extract and returned to the injections, but experienced no relief from them; when the evacuation took place, it appeared to him that razors, burning hot, were cutting the anus.

This condition had lasted several months, when the patient experienced vertigo after having been to stool; then he had, when walking or labouring, sudden and fugitive cerebral congestions: his strength failed rapidly; his mind became affected; he fell gradually into a profound melancholy; gloomy ideas, that he endeavoured to banish from his mind, beset him incessantly and caused him to seek solitude and obscurity; there he groaned in secret over his sad condition, and often poured forth an abundance of tears. He had a horror of suicide, and yet an evil genius always seemed urging him to it; the sight of pointed bodies, of cutting instruments and fire arms made him tremble, and caused in him a desire to kill, which he could only get rid of by subjecting himself to some acute pain, by pinching, for example, strongly some part of the body.

Buried in his melancholy thoughts, he spoke to nobody, and if the objects of his affection sought to divert him from them, he only replied roughly to their officiousness. He perceived his venereal desires progressively diminish; but it was not that which most troubled him, it was his mental condition; he had a horror of doing wrong, and yet felt urged to it in spite of himself; thus, he loved dearly his wife, and yet took pleasure in tormenting her and seeing her weep.

Struck with these contradictions, that he could not comprehend, his mind became so far deranged that he believed himself possessed with the devil, and passed whole hours in prayer in order to defend himself against temptation.

A sensation of hunger tormented him incessantly; he ate frequently and with avidity, but his digestion was painful and

laborious. Notwithstanding numerous applications of leeches, the repeated use of baths, demulcent drinks, &c., the symptoms became aggravated in an alarming manner. His sufferings were never greater than on leaving the bath.

One day, after having been to stool, wishing to see if his fecal matters were still besmeared with blood, he noticed upon the ground a considerable quantity of whitish and viscous matter that he thought was semen. To make sure of it, he made it a habit to urinate before going to stool, and then to cap the gland with a piece of paper: it rarely happened that he took it off without finding in it a certain quantity of seminal matter: he observed, also, that it produced in the canal a sort of tickling accompanied with heat.

After having passed six months in this deplorable condition, the patient was seized one day with a violent indigestion, caused by a salad of cucumbers; a profuse diarrhœa followed, which lasted about fifteen days, and increased much the weakness; but, after its disappearance, the fecal matters gradually resumed their natural consistency and were ever after passed without pain or appearance of blood; the seminal losses, caused by the efforts of defecation, no longer took place, and all the physical and normal symptoms mentioned above, gradually became entirely and spontaneously dissipated.

For several years past, Felix B. has enjoyed the best health; all his functions, without exception, are perfectly performed.

M. B. student in medicine, heard me one day in my clinical course expose the diverse symptoms which may arise from seminal losses, and the varied causes which may produce them: then only did he understand the nature of the singular disease that had been to him a source of deep despair, and he spoke to me about it on leaving the amphitheatre: I desired him to write down his recollections of it, and to give me his notes: and it is from them that I have compiled this case. The scrupulous accuracy of which, I think, I am able to guarantee.

Blennorrhagia brought on inflammation of one of the testicles and induced an irritability of the genital organs; it must, consequently, have predisposed them to the production of seminal losses; but what immediately determined their appearance was very evidently the constipation caused by the use of the extract of *Laffeteur*.

Very soon afterwards the symptoms developed themselves which ordinarily accompany fissures of the anus, then those which belong to diurnal pollutions.

This is probably what took place. In consequence of one of these prolonged states of constipation, a hard and copious stool distended beyond its natural limits the mucous membrane lining the sphincters, and a rupture took place. From that time, the attempts at defecation having become painful, the patient delayed it as much

as possible; the accumulated and hardened fæces in their turn increased the rupture; for it is thus that fissures of the anus are ordinarily produced and kept up. The diarrhœa, that lasted fifteen days, gave an opportunity for cicatrisation to take place without any further rupture.

In this way we can easily account for the appearance and cessation of the seminal losses, as well as for the extraordinary symptoms that tormented the patient for six months.

I have already shown hypochondriasis under many different forms as a sequel of diurnal pollutions; but never before has it presented itself with symptoms like these now under consideration.

This young man, naturally of a good and amiable disposition finds himself beset during the whole of his sickness with the most frightful propensities, at which his mind revolted so much, that the loss of his health was nothing to him in comparison with the pain that he experienced from them. His reason must have indeed been shaken through despair, for him, incredulous as he was, ever to be led to admit the intervention of the devil, as the only possible way of explaining this impulse to evil! And he must also have had strong faith in it thus to pass whole hours in prayer.

To what, however, was the aberration owing that could produce such terrible results? to how many reflections ought such a fact to give rise as to the morality of the acts of the sick man, when at the very time the seat of the disease does not appear to have any connection with the brain?

Fissures of the anus must often give rise to more or less abundant seminal losses. The silence of authors upon this point proves nothing, since, notwithstanding the zeal with which I have for a long time investigated all the causes which may give rise to pollutions, I myself have so seldom improved the opportunities that I have had of interrogating these patients upon this subject.

When I think of the violent efforts that they make in going to stool, of the acute pains and spasmodic contractions of which the rectum is the seat, of the great disturbance that so slight an excoriation induces in all the functions of the economy, I cannot prevent myself from believing that fissures of the anus often provoke abundant seminal losses.

The patients dread going to stool because this function renews all their pains, the fecal matters accumulate in the rectum and there become hardened. When at length the irritated bowel contracts in order to expel them, they become engaged in the opening of the anus and produce the fissure: the sphincters, irritated by this additional pain, contract spasmodically, in spite of the will of the patient; a struggle takes place then between this muscular ring and the intestines, aided by all the abdominal muscles. The efforts are so violent and so prolonged that the respiration is suspended and the countenance becomes injected and livid; it appears as if the blood would burst out through all the pores.

It is difficult to believe that the vesiculæ seminales escape all compression at such a time.

We must also take into consideration the pains seated near the verge of the anus and the spasmodic state of all these parts; for these phenomena react more or less upon the genito-urinary organs.

In fine, fissures of the anus are very soon followed by changes, in the physical and moral condition of the patients, too great to be exclusively attributed to the pain.

I have seen young men arrive at the hospital in a state of weakness and dejection that contrasted strongly with their florid complexion and volume of muscle: it was especially on the day that they had been to stool that they felt themselves faint, wearied and discouraged. They had ordinarily lost all venereal desire; the erections were feeble, of rare occurrence, and incomplete.

I regret not having made a collection of these cases, but I recollect perfectly these circumstances, and every thing inclines me to attribute them to seminal losses already complete.

Be it as it may, it is a subject for investigation that I point out to the attention of practitioners.

No. 44.

Equestrian exercise—Constipation—Pollution—Impotence—Violent and repeated cerebral congestions, &c.—Ascending douehes—Cauterisation—Sulphurous baths, hot and cold dashes upon the loins and perineum—Cure.

M. de B. came to consult me in the month of May 1834, for a cerebral affection, upon the nature of which some distinguished physicians were not agreed, but which they considered as being very grave.

He was of medium stature, had a large chest, strongly developed muscular system, thick brown hair, thick beard, and a full and florid countenance.

Notwithstanding these appearances of vigour and health, I very soon observed that his knees were slightly bent, and that he could not remain standing without continually shifting the weight of his body from one limb to another: his voice was feeble and thick; his tongue was embarrassed and only articulated sounds in a very confused manner; his attitude was timid, and his mien uneasy and suppliant: he had been married fifteen days.

His mother-in-law and young wife, who accompanied him, informed me that within this time he had had several cerebral congestions, (*coups de sang*) during which his face became strongly injected. The first time, the physician, called in the night, hastened to take away about three pounds of blood, which prevented apoplexy; still further bleedings and several applications of leeches had arrested other congestions but did not prevent their return. The patient had also become subject to vertigo, and could no longer look up high without danger of becoming ill; his limbs had become weakened to such a degree that he had several falls whilst walking

upon very level ground : his ideas had lost their clearness, and his memory was often at fault.

The two families being dismayed by these symptoms, came to Marseilles. Several distinguished practitioners were agreed as to the existence of a grave disease of the brain, without being able to explain its nature : the majority however decided upon a softening of the brain (*ramollissement du cerveau*): my name had been mentioned in the course of the discussion. The next day they decided to bring the patient to me.

The appearance of his countenance during the whole of this conversation, the coincidence of these congestions with the time of his marriage, and the bad effects of blood-letting, made me wish to have a private conversation with him.

As soon as we were alone, I questioned him as to what had taken place : he understood me perfectly, and informed, me stammering, that the unexpected appearance of menstruation at first prevented all intercourse, and that afterwards, he found himself completely impotent. He attributed his catastrophe to the presence of the menses, to the cerebral congestions and loss of blood that they had required, &c.

But all this was only the illusion of self-love, for I very soon arrived at the first cause of this impotence, and found that it arose, as I had all along suspected, from diurnal pollutions.

The following is what I obtained in answer to my questions.

At 16 years of age, M. de B. was possessed of one of the most robust constitutions, and of an ardent and passionate disposition. Placed at college, he there contracted the habit of masturbation : at the end of three months, he had very frequent nocturnal pollutions, pains in the chest and troublesome palpitations, that warned him of the danger he was running ; he corrected himself of it and returned home.

Having become free, he subdued his impetuous temperament by the most violent exercises, such as hunting, and especially by riding on horseback ; he also became passionately fond of agricultural pursuits. This new mode of living so completely re-established his health, that he was constantly annoyed with energetic and importunate erections, against which he usually employed cold lotions and river bathing, even in the most inclement seasons, &c.

He had never committed any excesses with women, and was free from any blennorrhagia or syphilitic affection.

In 1831, his erections were rather more moderate ; and he became costive, which he attributed to the exercise he was taking, especially to that of riding.

In 1832, he experienced a numbness and formication in the feet and legs.

In 1833, there came on frequent blindness of vision and flashes of heat in the face ; which he attributed to the increased constipation. At the same time, the erections became more and more rare, less energetic, and at length incomplete : the ability for intellectual

labours diminished; the cerebral congestions increased in frequency and intensity; the countenance became habitually high coloured, and the head hot: an almost constant pain became seated about the orbits; his character became restless and peevish.

The family physician attributing all these symptoms to plethora, practised several venesections that produced no amendment.

In the month of March, 1834, a marriage of convenience was essayed between M. de B. and a charming young lady who resided in the country about two leagues from the city; in order to visit her and to superintend the management of his estate, he was obliged to take long and repeated rides: as the time of marriage approached, they became so frequent that he passed most of his time on horseback. His costiveness was still further increased; M. de B. went forty days without going to stool: he rendered in one collected mass a great quantity of semen, although the penis was not in a state of erection. He had already noticed this circumstance several times, but attributing it to his excessive continence he was but little disturbed by it. His urine habitually muddy, was passed slowly and with difficulty; it deposited an abundance of a thick and flocculent matter.

He saw the moment of his happiness arrive with a vague sensation of uneasiness, for which he could not account: he loved his affianced strongly; yet he felt when near her more embarrassment than pleasure.

I have already mentioned what took place and what I had noticed: I ought to add, that having examined the genital organs, I found them, contrary to expectation, very strongly developed; the penis was of uncommon dimensions; the testicles were large and firm, only the scrotum was a little elongated: the patient experienced in all these parts a singular formication and numbness; it appeared to him as if they were bound with iron: these sensations increased when lying by the side of his wife; the penis even diminished in volume, shrunk and retreated towards the pubis the more he endeavoured to excite an erection.

The assemblage of all these symptoms could leave no doubt as to the nature of the disease; it was evident that all idea of cerebral affection must be abandoned, and that the diurnal pollutions must be referred to the costiveness, as well as all the symptoms resulting from them.

The first indication then to be fulfilled, was to overcome the constipation; I even hoped that this would be the only one: the age of the patient, the vigour of his constitution, and the remarkable condition of the genital organs, led me to suppose, in fact, that the cure would be prompt and easy: this, however, did not take place in so simple a manner.

The next day the patient commenced the use of the ascending dashes (douches ascendantes); he was put upon a vegetable regimen and iced milk.

The first dashes produced the evacuation of an immense quantity

of fecal matter, hard as stone: it was not until after the sixth that they assumed the ordinary consistency. I lowered the temperature of the water then to 77° Fah., then to 68°; the last dashes were given at 60°.

After the twelfth I suspended the further use of them, and from that time the stools took place regularly every day, without the least effort.

During this time the countenance of the patient lost its livid appearance, and assumed a natural colour; the confusion of the senses gradually diminished and at length disappeared entirely; the legs became stronger, and the standing posture could be longer endured without inconvenience; he took some very long walks without fatigue; the voice regained its strength; the eye resumed its vivacity, and all the movements acquired a greater degree of assurance.

At the end of fifteen days, the seminal losses had completely disappeared during the defecation, but the urine was still muddy. The erections had become sufficiently energetic to make the patient believe that he was cured: yet when he essayed the proof, the rigidity of the penis gradually subsided or else the precipitate ejaculation suddenly put a stop to it. The use of ice and cold lotions did not produce any better result.

At the end of a month, I determined to practise a cauterisation of the prostatic portion of the urethra, in order to act more directly upon the orifice of the ejaculatory ducts. When the inflammation had subsided, the erections became more complete and more energetic; yet the ejaculations were still too much hurried to permit the accomplishment of the act.

The period of the thermal waters having arrived, I sent the patient to Aix en Savoie, where I saw him again a short time afterwards. He had not derived any evident advantage from the use of the waters, either by bathing in, or drinking them. I prescribed then the water dashes, alternately very hot and cold, upon the loins and perineum. The cock was changed when the sensation of heat or cold could no longer be endured; this operation was stopped at the end of 20 or 25 minutes, with the cold dash: afterwards the skin remained injected for several hours.

The effect of these dashes was decisive: after the first, the erections resumed a character of vigour that reminded the patient of his former trouble from them. He was at length able to accomplish the object of all his desires, notwithstanding his apprehensions and the extraordinary disproportion of the parts.

He still continued for some days the use of these dashes. When he left, the genital functions were as completely re-established as all the others: only (and this is very remarkable) the ejaculation has become extremely tardy since the use of these dashes.

I have perhaps gone into very minute details; but this subject is connected with the most serious interests of society, with the happi-

ness and repose of families. I confess, also, that I was deeply interested in the situation of a young man whose misfortunes were unmerited, and could not have been foreseen ; of a young girl also of sixteen, forced to enter into a delicate intimacy, yet resigned to all through love and duty.

It is evident, that the seminal losses were owing to constipation.

The patient had been given to masturbation : pollutions succeeded these excesses, but did not last but three months, and the health, temporarily deranged, was very soon confirmed under the influence of the most violent exercises. M. de B. was even annoyed for several years by venereal desires that must have been very energetic, if we may judge from the means he resorted to in order to overcome them.

From that time he did not commit any excess ; he had neither blennorrhagia nor syphilis : there is then only the constipation, in the whole history of his life, which can explain the seminal losses.

But to what must this constipation be attributed ?

From all the information that the patient gave me as to his mode of living, I am convinced that it must be attributed to his riding on horseback. In fact he sometimes passed whole days mounted either for hunting or superintending the management of his estates. As the time of his marriage approached, these rides became more frequent and longer : the constipation then lasted *forty days*. The weakness of the legs, the confusion of the senses, &c., increased in the same proportion. This influence of riding upon the margin of the anus and rectum is indeed very common and easy of explanation.

This case recalls involuntarily the well known opinion of Hippocrates upon the impotence of the Scythians, an opinion that must have been based upon facts analogous to this. I shall return again to this subject ; but as we were investigating the causes that may act upon the vesiculæ seminales through the medium of the rectum, I was desirous of citing a striking instance of the influence of this mode of riding.

M. de B. accustomed to rich food, of a distinctly marked sanguineous temperament, had a large chest, thick muscles, and a very florid countenance ; it is not astonishing that they should have bled him often to overcome the cerebral congestions to which he was subject ; that on the night of his mishap, the blood should have rushed to his head with still greater impetuosity ; that all should have believed him to be in imminent danger of apoplexy ; and that afterwards they should have attributed the weakness of the legs, the frequent falls, and vertigo, to a disorganisation already advanced of the cerebral substance. All this is certainly very natural ; yet there was no foundation for it, and I had suspicions of it from the first moment, although the patient was brought to me for a cerebral affection.

Why had I this impression ? Because I had already seen many analogous cases ; because there is in all these patients, in the eyes,

voice, attitude, and countenance, something timid and bashful that no language can exactly describe, but which we acquire the habit of discerning without stopping to account for it.

Be it as it may, the case is well adapted to render us circumspect. I confess that venesection appeared well indicated, but they never produced any good effects, either immediate or remote: indeed, on examining them more closely, it would have been apparent that the symptoms increased a very short time afterwards. But preconceived opinions throw a thick veil between objects and the most piercing eyes. (Nos. 1, 2, 20, 41.)

It is this prepossession, especially, that I should like to do away with. It is sufficient, to create a doubt, to remember that we may be entirely deceived in the very cases that appear to be the most evident; and no doubt is a great step towards truth.

The ascending dashes put an end to the constipation; but this was not sufficient to effect a cure. The seminal losses diminished and even ceased during defecation; but the urine remained muddy, and the erections incomplete. Ice, cauterisation, and the use of the sulphurous waters were not sufficient to effect the cure.

There could not, however, exist any serious lesion of the genital organs. We cannot then attribute this continuance of the disease to any thing but the relaxation of the ejaculatory ducts, caused by a long habit of allowing the semen to escape in a passive manner; which shows the importance of checking this habit as soon as possible.

The cold and hot dashes upon the loins and perineum produced a sudden and decisive change: I have obtained the same results in similar cases. I shall return again and again to the mode of administering them, &c.; but in the mean time I ought to say that they have never succeeded with me when there existed any irritation in the genital organs.

No. 45.

Considerable and prolonged exposure to cold—Incomplete paralysis of the rectum—Seminal losses during defecation—Application of galvanism—Cure after the ninth trial.

M. V., captain of infantry, aged 29 years, had five or six blennorrhagiæ, then a chancre, for which he took a good deal of sublimate.

After this treatment, he left Metz in 1822, to go to Spain. Having arrived at Lyons, he was detained there, for three weeks, by a disease, the most prominent symptom of which was an obstinate constipation, accompanied with fever.

During the rest of his journey, he was obliged, for the first time to wear a suspensory bandage in order to support the weight of the left testicle, the veins of which were varicose: in other respects for the remainder of the campaign, he experienced no inconvenience but that caused by the hemorrhoids.

After having borne very well the fatigues of warfare, M. V., on his return to France, suffered for a whole night from the severe cold, being but thinly covered. The next day he experienced in the lower extremities acute and lancinating pains, which were soon replaced by a sensation of cold principally referred to the hypogastrium, and to a space below the left coxo-femoral articulation.

From that time there was developed a new series of symptoms. The patient perceived that his limbs were growing weaker every day; he became subject to costiveness that was more and more obstinate; it appeared to him that the powers destined to the expulsion of the fecal matters were struck with paralysis: he felt in the distended bowel a sensation of elastic reaction, rather than that of a muscular contraction. Abundant seminal losses accompanied these efforts of defecation.

A great disturbance of the system followed the accumulation of the excrements. There no longer existed any venereal desire, the erections were of rare occurrence and incomplete, the root of the penis was flaccid and could be bent in any direction; the gland alone remained rigid. Coition could take place but seldom, and that only under the most favourable circumstances; it was always followed by a still greater weakness. Digestion was laborious; the wind, accumulated in the intestines, distended the abdomen, and gave rise to pain in the epigastrium and hypochondria. The skin was habitually dry.

The patient wanted to take exercise in order to favour the transpiration; he was in a constant state of agitation, because, whenever he stopped to rest for a few moments, he felt himself suffering from the cold. His disposition had become very irritable.

The suspensory bandage incommoded him; he removed it in order to take rather a long walk; he had no sooner returned than a considerable engorgement of the left testicle came on. Five applications of leeches were unsuccessful in procuring its resolution.

About the same period the sublimate was given in solution for the purpose of removing some pretended venereal excrescences of the anus, which were in reality nothing but the remains of hemorrhoidal tumours. These different remedies increased in a perceptible manner, the weakness of the legs and the derangement of the digestive organs.

When Capt. V. came to the hospital, I was struck with the extreme pallor of his countenance and the flaccidity of all his tissues. His form was round, the cellular tissue very abundant and slightly infiltrated, especially that of the lower extremities: the skin was white, thin, transparent and habitually cold; the pulse small and feeble. I very readily ascertained that the tumour of the testicle was nothing more than an ordinary hydrocele.

From the succession and *tout ensemble* of the symptoms, I inferred that the action of intense and prolonged cold had left a deep impression upon the inferior portion of the medulla oblongata; as

I had observed in other cases that I had seen. The debility appeared to me to be the predominating symptom in this patient and there was no appearance of irritation in the rectum or genito-urinary organs. Consequently, I concluded to submit the parts affected to the influence of galvanic shocks.

The first application took place the 11th of February, a current being established for twenty minutes between the sacrum and hypogastrium, then between the two thighs for the same length of time. The shocks were quite feeble, because there were only 60 drops of sulphuric acid to a pint of water. Yet the next day the patient felt less cold and numbness in the left limb and genital parts, and less difficulty in passing his urine; he also had a stool.

The 12th, second trial of galvanism upon the same parts, and for the same length of time, but with 80 drops of sulphuric acid.

The 13th, third trial with 100 drops; the shocks were stronger, made greater impression, and he continued to improve.

The 14th, fourth application of the galvanism with 140 drops of sulphuric acid. The current was established from time to time, between the loins and perineum, or surface of the hydrocele. The next day, an easy stool without injection, and a feeling of strength in the rectum; less numbness in the lower extremities, from the pelvis to the knee; same state of the legs and feet: perceptible diminution in the size of the hydrocele: more energetic erections: the patient is very gay notwithstanding the fatigue that these commotions have caused him, he speaks of them with pleasure, but wishes to have a few days' repose.

From the 15th to the 19th, suspension of the galvanism; no amendment during these four days.

From the 20th to the 24th, five other applications of galvanism like the preceding, but with a continually increasing quantity of sulphuric acid.

Free and daily return of the stools, without effort or seminal loss; erections frequent and complete; emission of urine easy and in a full and very long stream. Entire absorption of the fluid effused into the tunica vaginalis. Digestion strong; disappearance of the intestinal gases; re-establishment of the heat and strength in the lower extremities.

A short time afterwards M. V. rejoined his regiment and resumed his duties as before his sickness.

Four or five years afterwards, I again saw M. V. *chef de battalion*. He informed me that his health had not undergone any change.

This patient had five or six gonorrhœas and a chancre; he adopted several powerful anti-venereal remedies, of which one at least was useless and even injurious. These are indeed reasons why his case should have been placed among those treated of in the third chapter. But, on the other hand, he had had the piles for a long time; several of them had even been mistaken for venereal

excrescences, a mistake which is not uncommon; and the pollutions were owing to the distension of the rectum, which very much resembles the preceding cases (especially Nos. 39, 40, 41, 42).

It is probable that all these circumstances had some influence in producing the disease, since Captain V. had already had at Lyons an obstinate constipation; we must then take that into consideration: but the determining and characteristic cause was evidently the severe cold to which the patient had been exposed for the whole of one night. This is what gave to the disease a peculiar character, and one that we do not find elsewhere.

The first time that I saw this patient, I attributed the weakness of the lower extremities, the constipation, &c., to the seminal losses; but afterwards, in reflecting upon the sudden and indelible effect of this long exposure to cold, I recalled to mind cases of the same nature, in which this same agent had left a deep impression of debility in the parts that had suffered the most from it. I was struck with the general and truly characteristic state of the constitution, with the infiltration of the affected parts, with the temperature of the skin, &c.; and I thought that the pollutions arose from the distension of the rectum, and that this was kept up by the kind of torpor that the cold had caused in the nerves of the lower part of the spine.

It was this train of ideas that led me to think of galvanism, from which I had obtained the best effects in similar cases.

The result proved the correctness of the opinion; it was even more prompt and decisive than I had dared hope it would be.

This patient had a hydrocele, which appears to have been brought on by the repeated gonorrhœas, if I may judge from the numerous cases that I have reported in chapter II. But what is remarkable, is the rapidity with which the effusion disappeared under the influence of a few galvanic shocks. This effect proves clearly that it was the agent best suited to the occasion.

I must here report another case of the effect of cold, which is not less remarkable in other respects.

No. 46.

Intemperance—Prolonged exposure to cold—Chronic inflammation of the bladder—Pollutions, &c.—Cauterisation—Cure. Relapse—Same treatment—Same result. Remarkable influence of the bladder upon the rectum.

G., a soldier in the 4th regiment of light infantry, passionately fond of wine, taught fencing and dancing, which furnished him with the opportunities and means of indulging to excess. Yet his health had continued good till the age of 30, with the exception of a few gonorrhœas of short duration; when one day, being under the influence of wine, and covered with sweat, he entered the water up to his middle, and then left his clothes to dry upon him.

Some time afterwards, G. experienced quite an acute pain in the

lumbar region, a sensation of weight in the hypogastrium, a more frequent desire to urinate, and some difficulty in voiding the urine. (Camphorated frictions upon the loins, rest, strict regimen: momentary amendment.)

G. was not long in perceiving that he became fatigued sooner than formerly; that his legs were every day growing weaker, and he was obliged to give up his fencing and dancing. He continued however to do duty for eighteen months, but with even increasing difficulty: at length he became so infirm that he was obliged to leave the service.

Having returned home at 33 years of age, he became a tailor. He had worked at his trade but a short time, when he perceived that he passed semen without erection or pleasure. These pollutions became more and more common, and were accompanied with a frequent and irresistible desire to go to stool: it was with great difficulty that the urine was passed, and that only after very fatiguing efforts.

During the years 1830 and 1831, the weakness of the legs still increased; the digestion became laborious, and the genital organs fell into a state of complete relaxation.

In March, 1832, in consequence of some excesses in drinking, G. was attacked with a complete retention of urine. (Baths, emollient fomentations, drinks of the same nature). Strangury succeeded this state of things; and this was very soon followed by incontinence of urine.

In May, 1832, artificial hydro-sulphurous baths: no amendment.

In September, baths of Balaruc: same result.

The 4th of October, G. entered the hospital Saint-Eloy. Two moxas were applied to the loins; and afterwards four cauteries a little lower down.

The 1st of November, G. took some broth with wine: the next day there came on an intense irritation of the neck of the bladder (leeches to the hypogastrium, baths, camphorated mixture), the pains diminished, but the emission of the urine was preceded by the discharging of a milky fluid.

When I took charge of the hospital, I found the patient in the following state:

Aged 35; medium size, fair skin, face pale, hair black and sparse; voice feeble and a little thick; digestion laborious, especially after the use of animal substances; frequent desire to go to stool; the presence of the fecal matters in the rectum produces a painful impression, that causes their involuntary expulsion. The urine passes off every ten minutes, or at the latest every quarter of an hour, without the patient being conscious of it; it contains an abundant sediment of a greenish white appearance, flocculent at the surface, and is very readily decomposed. No venereal desires; not the least appearance of erections. The inferior extremities are so feeble, that they cannot support the weight of the body. The legs are the seat

of osteocopic pains, and the feet are constantly cold. The patient appears indifferent to every thing.

The 14th of November, slight cauterisation of the neck of the bladder and of the surface of the prostate; but little pain, no flowing of blood, burning sensation during the emission of urine.

The 22d, perceptible decrease in the urinary sediment.

The 26th, disappearance of the purulent mucosities.

The 28th, urine limpid, retained half an hour, but still passed involuntarily; fecal matters retained better; inferior extremities a little stronger.

The 29th, second cauterisation of the same parts, but more energetic; pain quite severe, followed with a burning sensation; urine bloody, and passed more frequently.

The 4th of December, the patient walks without the aid of crutches; his appetite and his gaiety are returning: the succeeding days, the urine and fecal matters are better retained.

The 11th of December, third cauterisation, commencing with the bladder and terminating at the bulb of the urethra.

The 18th, the patient retains his urine for an hour, and it is perfectly limpid: animal substances are well digested: the erections are returning: the legs have regained their former vigour: the face has become florid and animated: his gaiety has returned; the fecal matters are retained as in the healthy state.

The 20th, the patient feels so well that he leaves the hospital; his convalescence continues, and it even makes the greater progress the more exercise he takes.

In the month of February, 1833, G. made quite a long journey into a country covered with snow, and drank considerably of wine in order to warm himself. In the month of May, he entered the hospital in almost the same condition as the first time. I practised a fourth cauterisation like the last; it produced the same effects.

At a later period I administered tarred water and artificial sulphurous baths. At the end of two months all the symptoms disappeared, and the patient left the hospital perfectly re-established.

A long exposure of the inferior extremities to cold was followed, as in the preceding cases, by diurnal pollutions, by almost complete paralysis of the lower extremities; but all resemblance between the two cases is limited to this.

In Captain V. the cold acted especially upon the nervous system that arises from the inferior portion of the spine; it struck it with a sort of torpor, the effects of which were felt more particularly by the rectum: hence its distension by the fecal matters, the compression of the vesiculæ seminales, &c. There did not appear to be any irritation in these parts; therefore the galvanism produced a magical effect.

In the soldier, G., the cold produced its principal effects upon the bladder; the chronic cystitis, that resulted from it, extended its

influence successively to the vesiculæ seminales and rectum; the extreme weakness of the lower extremities was then only owing to repeated pollutions that were exhausting the patient: thus, cauterisation has produced the best results. I am convinced that galvanism could not have been borne.

Moreover, it is easy to conceive why, in this case, the cold should have acted upon the bladder, as intemperance must have predisposed this organ to it. The patient was drunk when he entered the water: at a later period, having taken a broth diluted with wine, he experienced a rapid increase of the symptoms; in fine, during the journey that he made in the midst of the snow, and which was the cause of his relapse, he often drank wine for the purpose of warming himself.

It is not, then, possible to separate this action of the cold from that of alcoholic drinks, of the effects of which, moreover, upon the urinary organs, it is easy to conceive.

I have already reported two other cases in which cold had an evident influence in the production of pollutions (Nos. 10 and 25); but this was manifested by very different phenomena, and, what is very remarkable, the means by which these four patients were cured were unlike in every respect: a fact which shows the indispensable necessity of multiplying particular facts, and of discussing minutely all the circumstances attending them.

In the case of the soldier, G., a phenomenon presented itself that proves, in the most evident manner, that the influence of the rectum upon the genito-urinary organs is altogether reciprocal.

The mucous membrane of that intestine was so susceptible, that it could not bear the presence of the fecal matters; as soon as they arrived at the same level with the bladder, they caused convulsive contractions of the muscular coat, that determined their immediate expulsion, in spite of the patient's will: the stools were not liquid. Mixed with copious mucosities, as in diarrhœa, they had but little consistency, because they were expelled as soon as they arrived at the inferior portion of the intestine.

No particular treatment had been adopted to overcome this irritation of the rectum; yet it diminished after each cauterisation, and disappeared with the inflammation of the bladder; the longer the patient could retain his urine, the more frequent the stools became. The will resumed its control over the two organs at the same time.

But if the inflammation of the bladder could have such an influence upon the rectum, it must have acted still more directly upon the vesiculæ seminales.

What did, in reality, take place when the patient was suffering from pollutions, that night and day came on, without either erection or pleasure, in the midst of the most perfect tranquillity? A certain quantity of semen entered the vesiculæ seminales and there determined involuntary and irresistible spasmodic contractions, like those of the bladder and rectum; the semen was expelled in the same manner as the urine and fecal matters, before it had acquired

the character peculiar to it after a longer continuance in these passages (Nos. 18 and 27).

We see, then, that all these parts are intimately connected with each other; that we must constantly contrast together the phenomena of which they are the seat, if we wish to obtain a just and clear idea of them.

They would be much deceived who should think that this influence of the genito-urinary organs upon the rectum is of rare occurrence; it is, on the contrary, habitual: only, it is unusual that it should manifest itself in so striking a manner.

I have not spoken of it until now, because I did not wish to complicate questions already quite obscure. But it is to this intimate sympathy that we must attribute the feeling of obstruction and weight about the margin of the anus, the habitual contraction of the sphincters, the obstinate constipation, &c., which are so often observed in patients affected with pollutions.

All those upon whom I practised a canterisation about the neck of the bladder, experienced a sudden burning sensation at the margin of the anus and in the rectum; the next day they already felt more strength in the intestine, and the stools were very soon more free.

But I must not, at present, enter into more extended details upon this subject.

No. 47.

Diurnal pollutions overlooked—Cerebral congestions—Broken down constitution—*Ascarides* expelled in three days—Immediate recovery.

M. C., captain of engineers, aged 32, already nearly bald, excessively lean, and of an extreme paleness, had the eyes deeply sunken and usually surrounded with a leaden hue, a feeble and shrill voice, and a timid and embarrassed gait: he was extremely cautious, even about the most trifling matters. He had often consulted me about his health, but I never attached much importance to his complaints, because I attributed them to the melancholy complexion of his character.

However, in 1824, his digestion became deranged in an alarming manner, and was attended with the disengagement of a great quantity of gas; the introduction of broth into the stomach was followed by considerable oppression in the epigastric region and by difficulty in the respiration, which was especially felt in the direction of the œsophagus, and terminated in the throat. This sensation perceptibly diminished as soon as the patient was able to expel some of the gas. He felt himself oppressed with general debility, and experienced great lassitude of the legs particularly, which contrasted strongly with his constant desire for movement and the habit he had of taking long walks. He was subject to frequent attacks of vertigo, with congestion of the head, especially when he stooped or when he had been reading for a few moments; on this account he thought that he was menaced with apoplexy.

His habitual leanness had still increased, especially in the thighs; the testicles had sensibly diminished in size, and the genital organs were ordinarily cold. The pulse was feeble and soft; the tongue pale and moist; pressure upon the epigastrium did not cause the least pain.

I could not believe, with the patient, that there was any danger of apoplexy, nor that he was afflicted with gastritis. I attributed all the symptoms that he felt to excessive seminal losses, but he could not, in his turn, admit my opinion.

For a long time he had abstained from coition, through fear of endangering his health; and for a still longer time he had had a horror of masturbation: he was not subject to nocturnal pollutions, and never had observed that he passed semen either in urinating or in going to stool.

Yet I suspected, from some ambiguous replies, that he was intimate with a young person who lived in the same house, and this *liaison* might be as injurious to him as the abuse of coition. In order to remove him, I sent him to pass the hottest part of the summer at Vigan in the Cévennes, urging him to observe himself closely during defecation, and to give me an account of his urine.

Some days after his arrival, he wrote me that he had in fact noticed, after each stool, a discharge of thick, whitish, and slightly unctuous matter, having a very feeble spermatic odour, and staining the linen of a pale yellow. The greater the efforts he made, the more abundant was the emission: still it was not precisely during the evacuation of the fecal matters that the semen escaped, but when he was dressing himself: then he experienced an obstruction in the rectum and a very strong contraction, accompanied with itching and heat.

I was not then deceived: the symptoms were caused by excessive seminal losses. I did not, however, attach sufficient importance to the peculiar circumstances accompanying them, and contented myself with prescribing cold injections and lotions, a vegetable and milk diet, with the view of avoiding constipation, and giving tone to the genital organs. These different means produced no perceptible change in the seminal losses.

At length I received a very long letter from the patient, full of minute and interesting details; but upon one side I read as follows:

“P. S. I noticed in one stool some little worms, like those found in cheese. This reminds me to tell you that I often experience itchings in the rectum that I attribute to a herpetic affection: there is a slight oozing from the intestine, and the fecal matters are mixed with a certain quantity of purulent mucus: the circumference of the anus is engorged.

This has existed since 1818; it came on after a violent inflammation of the intestines, accompanied with colic and tenesmus, which were renewed in 1822.”

The cause of the seminal losses was at length understood: I perceived also why it was not precisely during the expulsion of

the fecal matters that the semen escaped, but a little afterwards ; for these losses were not produced by a mechanical compression arising from constipation ; but were, in fact, the sympathetic result of the irritation caused by the presence of worms ; and this is proved by the obstruction, very strong contraction, itching, and heat, which then took place in the rectum.

The patient took, for three days, four grains of calomel, fasting, and in the course of the day, three or four glasses of the decoction of *Mousse de Corse* ; a warm injection followed by another extremely cold : once he took in lieu of it a demi-injection of warm milk, and a short time afterwards another, composed of a strong decoction of garlic : he pretended that he was better for it.

At the end of three days, perceiving no more ascarides in the stools, he discontinued this treatment for eight days ; after which, he took, on going to bed, four grains of calomel, and the next day six drachms of sulphate of magnesia, which procured four copious evacuations, in which he observed nothing peculiar.

This is the manner in which Capt. C. concludes his last letter.

“ My strength has already returned ; my stomach performs perfectly its functions ; the seminal losses have ceased, as has also the discharge from the rectum : the itchings and the dragging sensations that I experienced there have ceased.”

From this time the ascarides reappeared every year, and even twice in one year ; but Capt. C. treated himself : as soon as the least symptom announces the presence of worms, he rids himself of them in two or three days ; so that his health is not deranged by them.

Supposing him always subject to their reappearance once or twice a year, he ought still to be considered as cured, since he can free himself from them by means equally simple and efficacious.

No. 48.

Masturbation at the age of nine years—Obstinate nocturnal pollutions—
Ascarides—Cure in eight days.

I am going to transcribe the letter which Henry B., sergeant of the corps of engineers, addressed to me, asking my advice. I prefer to give the patient's own language, rather than to arrange his ideas :

From the age of nine years I gave myself to the infamous and brutal passion of masturbation. I ceased these manœuvres at the age of fifteen, because I was fortunate enough to read Tissot's work on onanism. From this period I date the origin of the nocturnal pollutions.

There resulted from them an impoverishment of the whole body : troubles in the chest ; continual pains in the middle of the back ; the whole nervous system is attacked ; my eyes are almost always red and surrounded by a leaden hue ; there are times when they make little jumps as if they would leave the orbits. I have very often observed that after having had a pollution, I experienced

prickings, like those produced by ants, between the two last ribs, with acute pains in the belly and kidneys.

It is in the morning especially that I feel the most prostrated; I am, as it were, maimed; when I get up it appears to me as if my arms and legs were bruised; my lungs are oppressed; I am as it were in a state of asphyxia; I have every evening buzzing in the ears; I have lost my memory, and it is impossible for me to study, and I can scarcely do my duty. If my condition is not very soon changed, I shall be obliged to renounce a military career; this has lasted several years, and it becomes worse every day.

Here are the remedies that have been administered to me by different physicians: I took for a long time a ptisan made from the seed of melons, &c. (*les quatre semences froides*); the cinchone combined with oxide of iron; mineral water with Bordeaux wine; a spoonful of lime water in a glass of milk three times a day; Hoffman's liquor in a glass of water, in the evening, on going to bed. I took also many river baths and cold injections. I applied, in the most inclement season, snow and ice upon the kidneys and genital parts.

I have not derived any permanent advantage from these different means. Sal ammoniac dissolved in water has only irritated the genital organs.

HENRY B.

September, 27th, 1826.

This young man was twenty years of age; his countenance was fresh and very florid, his proportions announced vigour and health: it would have been difficult to divine the cause of the deep melancholy displayed in his features.

After numerous questions, I ascertained at last, that he had had worms from his infancy, that he discharged them at every stool, and that the surface of the fecal matters was often entirely covered with them: from the description he gave of them it was very easy to decide that they were ascarides, amongst which perhaps might be found a few trichurides.

I prescribed for him four grains of calomel morning and evening; the introduction into the rectum of half a drachm of mercurial ointment and injections of tansy.

Eight days afterwards he came to announce to me that his pollutions had ceased, and that a change had taken place in his whole existence.

No. 49.

Hypochondriasis—Impotence—Cerebral congestions—Ascarides—Cure in eight days.

A., gardener, tall, dark complexioned and quite well formed; married for two years, perceived that after having been married seven or eight months, he was becoming less and less inclined for the venereal act: he lost his appetite, his digestion became difficult,

laborious, and accompanied with pain in the epigastrium, with flatuosities and frequent vomitings.

Pills of cynoglossum, sedatives, and demulcents of every kind, were prescribed by a distinguished practitioner of Montpellier, in order to allay the irritation of the stomach: the general debility and impotence of the genital organs increased; there was joined to these a disposition to inaction and drowsiness, an habitual state of torpor and very frequent vertigo, which made other physicians fear a near attack of apoplexy: leeches were in consequence prescribed, but the patient, notwithstanding his trouble, always rejected them, well knowing, as he said, that he had not too much blood.

In 1833, he came to consult one of my students whom I have mentioned at the commencement of this work, very seriously telling him, *qu'on lui avait noué l'aiguillette* for more than a year. After many questions as to the cause of the impotence, M. E. Verdier at length ascertained, that the patient had been constive for a long time, that he experienced intense itching in the rectum, and then passed in his fecal matter great numbers of little worms like those found in cheese.

Concluding that these ascarides were the cause of seminal losses, which the patient had not observed; M. E. Verdier prescribed for drink an infusion of mint, some aromatic injections, then some others that were salt and cold, copious enough to ascend high and to be strongly expelled. These last injections caused the expulsion of a great number of ascarides.

The difficulty in the digestion ceased almost immediately; the erections soon reappeared, and coition took place a few days afterwards. His strength soon became repaired, and his gaiety and love for work returned. This change was the result of eight days' treatment.

No. 50.

Nocturnal pollutions resisting every thing for six years—Deplorable physical and moral condition—Ascarides—Prompt cure.

The following case is perhaps the most interesting that has ever been communicated to me by a patient.

The manner in which he has retraced the smallest circumstance of his torture during the best years of his life, will be an excuse for its length:

I was born robust, and of healthy parents: at the age of 11, I accidentally contracted, by myself, the fatal habit of onanism; but I very soon perceived its pernicious effects upon my physical and intellectual faculties.

A person, whose duty it was to watch over me, reading probably my misconduct in my face, gave me a sharp remonstrance that corrected me of it. Two months afterwards my health became

re-established. It continued in the most flourishing condition until my fourteenth year.

At that period the *Contes de la Fontaine* fell into my hands, excited my imagination, and brought back the injurious habit that I had lost for three years.

The next year, 1815, I found, unfortunately, in a corner of my father's library, *l'Arcin*, *Bocace*, and other works of the same nature, that I eagerly perused in secret. About this period I contracted an intimacy with a married lady, who, enjoying my inexperience, excited in me, by kisses and lascivious conduct, the most violent desires, without ever allowing me to gratify them.

All these causes of excitement had so much exalted my nervous system, that I could not look upon a woman without experiencing palpitations and tremblings in all my limbs. Until then, I had not had any involuntary evacuation of semen, and notwithstanding all the provocations by which I was surrounded, I still preserved sufficient control over myself to determine them but once a week, on Sunday.

The excitement that I felt in the genital parts was so strong, that I was forced to plunge my penis into cold water, to moderate the ardour. I was large and strongly developed for my age: my health was robust, only for some time past, I had lost my usual embonpoint.

The 25th of October, on awaking, I found myself for the first time inundated with semen, without having been conscious of its escape: it must be remarked that on the preceding day I had taken a long walk, and had exhausted myself in useless efforts with the person of whom I have already spoken.

During each of the eight following nights I had several pollutions, which threw me into a fearful state of prostration. My emaciation was perceptible and my appetite failed in the same proportion. I renounced all my duties; I became a walking skeleton; still I did not despair of my safety: I thought a difficulty like this would soon cure itself. How much I deceived myself.

A false modesty prevented me from confiding my condition to my father, and I found myself thrown upon my own resources, to combat my cruel malady: but from that moment it became the only object of my thoughts. Self-absorbed, I became abstracted from all surrounding interests to attend only to my cure.

I at first devised the plan of tying the prepuce with a string, so that the glans might not come in contact with the clothes. This means, like all those that I had afterwards employed, appeared to succeed for a short time; but eventually it produced no effect.

How many times have I found, on untying this string in the morning, the whole space between the prepuce and the glans filled with semen. When I thus found my health, my happiness, and my life escaping from me, I could not refrain from tears: a cold sweat covered me from head to foot, death stared me in the face; I desired it most ardently.

I searched the library of my father, not for obscene works which I avoided as the pest, but for books of medicine, from which I sought relief. On lying down, I placed about my bed several chairs loaded with folios, such as Hippocrates, Galen, Ambroise Paré, collections of theses, &c., and I read till late at night in these different authors all that related to my condition.

During the year 1816, notwithstanding all the means made use of, I had not less than four pollutions a week. I have had several every night, for fifteen days in succession, after which there would be a remission of three days. This was just enough to prevent me from dying. I was frightfully emaciated; I experienced atrocious pains in the vertebral column; all my movements were painful; it appeared to me that my joints were filled with chalk; instead of synovia: when I walked, I felt my brain tossing about in my head. During the whole winter, I remained near the fire; my extremities were always cold, and I could not warm them.

Desirous of acquiring a knowledge of the human frame in order to understand medical books, I went to a butcher's stall to take lessons in splanchnology, which led me to many very extravagant explanations. I read all that I could find upon *tabes dorsalis*, and it was from these readings that I drew my methods of treatment.

Until then I had slept upon a feather bed; I relinquished it, and substituted a folding chair upon which were nailed cross pieces of boards instead of a sacking. I laid upon these boards a single woollen blanket and a sheet.

I thought that I should prevent pollutions by avoiding to lie upon the back. After fruitless efforts to correct myself of this habit, I made a leathern belt, which I fastened round myself every night before going to bed. To the posterior part was attached a block of wood so prominent as to oblige me to lie on my side.

I also attributed my pollutions to the habit I had of sleeping with the thighs strongly flexed upon the pelvis, so that my genital parts, being compressed and rendered incapable of becoming freely developed during erection, were exposed to friction. With the intention of obviating this inconvenience, I fastened my feet with cords to the lower extremity of the bed; my limbs were then in a state of extension, I could only turn to the right or left, I was stretched out as upon a rack.

That I might have nothing to fear from the contact of the sheets, I made a kind of wicker cage, that kept them raised above the level of my pelvis. Thinking that if I could prevent myself from sleeping, I should never have any pollutions, I substituted a piece of rough wood for my bolster, which every moment bruised my head and interrupted my sleep.

I persisted in these means of torture for many years, because I feared a seminal loss more than all the bruises imaginable. There remained only sufficient activity of mind to invent new plans or to perfect those that I had already employed.

I devised, for example, the plan of tying the prepuce itself to the

hairs of the pubes, so that my penis, on becoming erect, might draw upon them and thus cause pain that would awake me. After a few trials, deriving but little advantage from it, this method was replaced by the following. I compressed my penis with a band that I rolled strongly about it from the root to the summit of the glans; so that it was surrounded by four or five layers of bandage.

It often happened that I succeeded by the use of these different means in breaking the chain of ideas to which I also attributed my pollutions. But, at other times, all proved of no avail, my ideas only changed the object without being less wanton, for women were not the only subject of my dreams. My imagination was sometimes besieged by the most disgusting images; it presented to me in lascivious positions the bitches, goats, &c., that I had noticed during the day: having one day seen two flies couple, I recollect that this became reproduced in the night, embellished with all the allurements of the imagination, and caused an abundant evacuation of semen.

Yet I avoided with the greatest care all books and images capable of exciting erotic ideas. I shunned the presence of women, and gave up riding on horseback or in a carriage, and the use of every heating substance. In the excess of my despair, I even had recourse to prayer, and I promised to become converted if I got well.

What most astonished my family, was the change that had taken place in my character. I had become sombre and ill-humoured: I always kept in the shade with my hat pushed down over my eyes, because a strong light hurt me. I spoke but little, and, notwithstanding my sufferings, made no complaint.

As nobody knew the cause of my acting thus, they did not fail to call me odd, hypochondriac, misanthropic, &c. In fact, I was indifferent to all the amusements of my age, and took an aversion to society, because I could not endure the comparison of the happiness of others with my own misery: I was not at ease then, because I felt a continual desire to change my position. If I found myself compelled to remain, it became a punishment to me, and I sighed only for the moment of returning to my solitude.

In 1817, the seat of my pains changed, but I did not become any happier on that account: the pains in my kidneys were replaced by dull and continual colics, especially after my meals. I had a prodigious appetite, which accorded with the idea that I must eat a good deal to repair my losses.

I had read in a medical book, that milk, eggs, and figs made a good deal of semen, and I gorged myself every morning with milk, eggs and figs. I had read that good wine was a sovereign remedy against debility, and I failed not to drink every day a great quantity of pure wine. After meals, I had acid eructations, that burnt my throat; I had colics and borborygmus; my abdomen was inflated with gas, and which again compelled me to avoid the presence of men.

I had diarrhœa during the whole year: when I went to stool,

where I sometimes remained an hour, I experienced tenesmus and horripilations, fugitive convulsive tremblings in the muscles of the thighs, arms, and even in the orbiculares of the eyelids.

Several times I wished to diet, or to diminish the quantity of my food; but I suffered so much from hunger, that it was impossible to accustom myself to this regimen.

Having read a work upon the good effects of cold baths, I took several in the Loire. But these immersions, even during the dog-days, were followed by colics: an icy coldness made me shiver all day; my constitution was so weak, that reaction could not take place.

At a later period, on going to bed, I enclosed my genital organs in a kind of tin box, fastened about the loins by straps, but if I thus avoided friction, I endured intolerable compression.

Afterwards, in order to awake at the moment of having a lascivious dream, I tied my penis, when in a state of relaxation, to my testicles. The pain caused by the erection awakened me, to be sure, but it compelled me to unfasten the string, and still the same accident occurred: I have even known it to take place at the moment when I was undoing the fastening, and that from the friction I was obliged to exercise about the penis.

At the same time I observed that the fulness of my bladder in the morning, exposed me to pollutions: I resolved not to drink any more in the evening; a privation the more painful, as I was exceedingly thirsty: I urinated before getting into bed, and I placed at my bolster an alarm clock, in order to arouse myself at pleasure for the purpose of emptying my bladder. This device was useful, but only for a short time.

In the daytime, I carried a mirror about me: I examined my dull and hollow eyes, and my leaden complexion: I counted the wrinkles in my forehead, and the projections in my skeleton.

Almost all my hair fell off, and that which remained, became so painful to the touch, that I thought I had the *plique polonoise*, (Plica.)

I went so far, as to smell every accessible part of my body, and I found them of a cadaverous odour.

I observed my urine and excrements very carefully. I noticed one day that a sandy sediment was deposited at the bottom of my night-vessel, and I immediately imagined that as much must have been formed in my bladder; I thought myself afflicted with the stone, and for a long time I attributed all my abdominal pains to this cause, as well as the cutting sensations that I sometimes experienced in the canal of the urethra.

I saw some little worms in my excrements: I believed them to be of the same nature with those which exist upon the remains of the dead, and, finding that I so much resembled a corpse, their premature presence did not astonish me.

I constantly experienced intense itching in the rectum, which I attributed to a darte *rongeante* (Lupus). My nose also itched.

I had continual palpitations that convinced me I had an aneurism of the heart.

Disgusted with life, I attempted several times to destroy myself, but my strength always failed me at the moment of giving the fatal blow.

Abandoned to the most frightful despair, not knowing what would become of me, and seeing happiness in the classes of society inferior to mine, I wished to descend to them with the view of ameliorating my condition. I announced to my family that I wished to learn a joiner's trade. They consented; because they were already accustomed to what they called my caprice, and they knew my brutal obstinacy. In fact I cared for nothing on earth, and when I wanted to do a thing, no human consideration could prevent me from accomplishing it.

I learned then, for three months, to turn and to manage the plane. But very soon disgusted with this manner of living, I became successively carpenter, mason, and ploughman. I lived like these labourers, and took part in their toils, hoping to become robust as they were. I could, however, endure these rude trials but a short time.

The changeableness of my character was a problem to every body about me. If the pollutions diminished for two or three days, I became less gloomy and more sociable; but as soon as they returned I again relapsed into my love of solitude. They altered the tone and force of my voice: as soon as they diminished, my voice resumed its clearness and strength; then I took pleasure in reading aloud to the family; but when they reappeared, I was compelled to renounce this amusement, to the great astonishment of those who had been in the habit of listening to me and of whom I could not make confidants.

In stooping one day to pick up something from the ground, I felt a painful cracking in my left ear, followed by a ringing that has never left me since that time. This was not the case with the toothach, to which I have been almost continually subject for more than two years.

In truth, language fails me in describing all the horror of my situation. My sleep, disturbed by extraordinary and frightful dreams, was not refreshing: I arose in the morning feeling as if my limbs were dislocated and bruised by blows with a club. My bodily dejection led me to remain in bed; but if I yielded to this deceitful charm, I had soon to repent of it. With what pain did I see the light appear when I had had three or four pollutions the same night! I would have preferred to have been buried ten feet under the ground: the terror that seized upon my imagination caused a colliquative sweat that inundated me; I had scarcely strength enough left to undo the bands with which I had tied myself the preceding night.

How often have I, during these melancholy days, taken food unknown to any one, and gone to bury myself, from morning until

night, in some obscure corner! There I poured forth bitter tears, and invoked death. If my eyes would allow me to read, I took with me J. J. Rousseau, Young's Night Thoughts, Elegies, and—of medical works—collections of post mortem examinations, for which I had a particular predilection.

In 1818, my pollutions diminished during the winter. I gained a little flesh, and gradually went into society, from which I had so long been estranged. They knew not the cause of this change: but it was not of long duration. At the return of spring, I relapsed into my former condition.

I attributed the temporary happiness I had enjoyed, to the application of a leathern ring, which fastened by a clasp, and was attached to the body by two cords. It had three iron points on the inside: my penis, when not erect, passed easily into this box: but when swollen, the space became too limited, and it pressed strongly against the points, which caused a pain that awakened me with a start. Immediately I undid the clasp, and my sufferings were allayed. When the erection had subsided, I replaced the ring, and so on.

Until this time I had experienced no difficulty in my chest: but having one day been exposed to a rain storm, I was seized on the next with an intense pleurisy, in consequence of which, for more than six months, I had an obstinate cough, attended with a slight hectic flush, and so much debility, that I could scarcely leave my arm chair. This time I thought myself consumptive, and I hoped it would soon terminate my sufferings. But I recovered a little during the winter of 1819; and this precious health again became the object of my most anxious solicitude.

In the spring, I had, as in the preceding year, a relapse of the pollutions, which threw me anew into the most deplorable condition.

In 1820, perceiving that no remedy could arrest my seminal flux, I thought of recurring to masturbation as a means of cure. I had always at least four or five pollutions a week, sometimes eight: I said to myself, "If I can regulate the course of nature so as to replace the involuntary losses, by others much less frequent, I shall be the gainer." In consequence I deliberately resumed habits of which I had felt a horror for five years.

This method succeeded very well for fifteen days, but, like all the others, I was obliged to relinquish it as soon as habit had destroyed its efficacy.

I then resumed the ring, in which I made some changes, because its points had successively ulcerated the whole circumference of the penis.

I again tried the river baths: they did me more injury than at first, because I was more feeble.

Having exhausted all the resources of my imagination, it only remained to try the effects of traveling. I requested permission to go to Montpellier, because I had read that that climate was favour-

able to consumptive patients, and my father consented. The confidence I had in this proposed journey gave me sufficient strength to perform it on foot.

Before closing, I ought to add that I was often menaced with attacks of apoplexy, and twice to such a degree as to lose my consciousness. Yet leeches applied to the anus or perineum always did me more harm than good.

A short time after his arrival at Montpellier, Mr. D. came to consult me, and interested me intensely by the ingenuous and animated description of all that he was able to recollect of his case.

I, at first, thought, with him, that his nocturnal pollutions were owing to an extraordinary sensibility of the genital organs, and to the precocious abuse that he had made of them: but, before undertaking any thing, I persuaded him to commit his whole case to writing, in order that nothing might be forgotten, and that the facts might be presented to me in better order. Some time afterwards he put into my hands the memoir that we have just heard, accompanied with designs, respecting the different machines in question. In reflecting upon it, I was struck with the fact of the existence of little worms in the fecal matters, which the unfortunate young man regarded as a proof of approaching death. I examined the anus, and found no traces of the *dartre rongeante* to which he attributed the great irritation he felt in the rectum: besides, this *dartre* did not explain the itching of the nose.

I then thought that these pollutions might have been kept up by the presence of the ascarides, and I persuaded him to direct all his attention to this subject: he immediately told me that he habitually discharged these little worms; that, several times, urged by the violence of the itching, he had scratched himself until he brought blood, and on withdrawing his finger he had found under his nail one of these ascarides alive. It was especially about ten o'clock in the evening, that he felt them descending into the inferior part of the intestine and even to within the sphincters.

Besides, his mouth was acid, and his pillow was wet by the great quantity of saliva that flowed from it during the night, &c.

Of all the remedies made use of with this patient, the calomel and cold injections were those followed by the most prompt and lasting effects.

At first, M. D. took his injections at a temperature of from eighteen to twenty degrees, then at fifteen, and even at twelve or thirteen degrees of the thermometer of Réaumur. His experience soon taught him that it was more advantageous to take them about ten o'clock in the evening, when the ascarides were descending towards the anus, of which he became aware by the increased itching. Besides, this was the time when they would have the most influence upon the pollutions.

But he also ascertained that to obtain all the desired effects, he must introduce into the intestine a great quantity of cold water, in

order to make it ascend as much as possible for the purpose of rapidly bringing away the highest ascarides, at the moment they became benumbed. Consequently he acquired the habit of retaining even three or four of these cold injections, and then of discharging them all at once. He thus brought away enormous quantities of ascarides, dead or benumbed, and this for several days in succession.

Anthelmintics, in injection or by the mouth, were less efficacious; besides, they were attended by inconveniences, as were also other purgatives.

A short time after the use of these various remedies, the pollutions decreased very rapidly and in a permanent manner. All the symptoms consequent upon them disappeared; his strength and embonpoint returned with incredible promptitude. But the pollutions did not entirely disappear until after the use of venery, and the influence of cold baths and gymnastics.

We have seen that on two occasions the patient was obliged to abandon river baths, because no reaction took place on leaving the water, even during the greatest heat of the dog-days. As soon as his constitution regained a little strength, he derived benefit from these cold baths: and after the expulsion of the ascarides, they were most efficacious in re-establishing his health: he also took them during the winter with great advantage.

Walking, likewise, did him a great deal of good. This is probably one of the reasons that led M. D. to the study of the natural sciences, which gave an object to his excursions. After having terminated, with distinction, his medical studies, M. D. undertook long and perilous journeys, which he made useful to the sciences. His labours bear the impress of an observing mind and of great ability; they have always been favourably received by the Institute.

Thus, for fifteen years, M. D. has remained perfectly well.

This case is a real drama, a drama complete and full of interest, in which we see a sort of fatality incessantly weighing upon the unfortunate being who struggles with courage and perseverance against unmerited ills.

He must have passed through all these trials; he must have written under the power of such a calamity; and he must have had this idea alone fixed in his mind, to be enabled to retrace all these circumstances with so much truth. The narrative of an uninterested observer could not approach it. These details unfold to us many of the mysteries of the human heart.

How many of these unfortunate beings are there in society whom we unfeelingly blame, when we ought to sympathise with, and especially to cure them!

Two of these patients, (Nos. 48, 50,) tormented with ascarides from their infancy, gave themselves up to onanism before the age

of puberty: they bitterly reproached themselves with it, and regarded this fatal habit as the cause of the pollutions which afterwards afflicted them. Far be it from me to attempt to diminish the just horror which this deplorable passion ought to inspire: but truth must outweigh every other consideration: these children were, in my estimation, more unfortunate than culpable.

In order that such a propensity should be established spontaneously, before the perfect development of the genital organs, they must have become the seat of a pathological irritation.

The presence of a stone in the bladder often excites, in boys, precocious erections and pains, which are felt in the fossa navicularis, and which they relieve by pulling at the end of the penis: this is why the prepuce in these patients is almost always of an extraordinary length. These manœuvres ordinarily lead them to habits for which they cannot be morally responsible.

The action of ascarides upon the rectum produces the same phenomena in a still more constant manner. I have often seen children, of two or three years of age, tormented with erections, almost constant, which were to be attributed to no other cause. This is a phenomenon so common that it has been mentioned to me by many nurses and old women: they even make use of a popular remedy, which, at least, proves that they understand the influence of these worms: they introduce into the rectum a suppository of lard, with the idea that the ascarides will come to feed upon it, and that they shall be able to extract them by drawing it out. There cannot then be any doubt as to the cause of these premature erections.

Children will be inclined to carry the hands to parts which are the seat of an inconvenient and almost continual pruritus; as they are, under similar circumstances, to rub the nose: but the sensation which results from frictions exercised upon such sensitive organs are far more intense; it must induce a much more irresistible tendency to it.

Why should one of these impulses, in these unfortunate creatures, be considered a crime more than another?

When reason comes with puberty, the patients may have sufficient control over themselves to resist this unhappy fascination, but then they experience pollutions that must still be attributed to the same cause that has produced the onanism; that is to say, to the irritation of the genital organs caused by the worms lodged in the rectum.

Ascarides even produce similar effects in the female. I have seen many little girls, of the most tender age, who were tormented with irresistible itchings of the genital organs, with copious leucorrhœa, accompanied with redness and excoriation of the clitoris and nymphæ, &c., which arose from the same cause.

It is then a constant and general phenomenon, since we observe it in both sexes.

The seminal losses which take place during defecation, in those

who are tormented with *ascarides*, cannot be attributed to the compression of the *vesiculæ seminales*, for constipation does not exist; besides this would not explain the nocturnal pollutions: it must then be admitted, that the continued titillation exercised upon the rectum and margin of the anus, by the *ascarides*, extends its influence to the genital organs, and gives rise to the spasmodic contractions of the *vesiculæ seminales*.

This is all that I wished to remark for the present.

To sum up the whole, it results from the cases reported in this chapter, that affections of the rectum induce pollutions, 1st, by determining a compression of the *vesiculæ seminales*; 2d, by creating irritation in them.

All the causes which oppose the escape of the fecal matters, and which favour constipation, act in the first manner. I have preferred reporting examples of mechanical obstacles placed at the margin of the anus (Nos. 38, 39, 42, 43), because in cases of this nature, the cause is perfectly isolated, and its influence palpable: but it is clear, that every physical action, like that which results from riding on horseback (No. 44), or in a carriage, from the sitting position a long time continued, &c., and that every medicinal impression, which tends to favour constipation, must have the same result. In all cases of this nature, the influence of the rectum upon the *vesiculæ seminales*, is owing to its distension by the fecal matters; it is altogether a mechanical action.

The other phenomenon is essentially vital. The diarrhœa (No. 39), the *ascarides* (Nos. 47, 48, 49, 50), the darts of the anus (Nos. 32, 33), can only act in this manner. The same must be said of injections too hot or too cold, of certain drastic purgatives, &c.

But, in many cases, distension and irritation of the intestines act simultaneously upon the *vesiculæ seminales*. Hemorrhoids and fissures of the anus, are not only an obstacle to defecation, but they are attended with pains and spasmodic contractions, that must also be considered. An obstinate constipation is rarely exempt from heat and irritation in the rectum and neighbouring parts. Darts of the anus are often accompanied by a contraction of the sphincters, which interferes with defecation.

We have seen also by cases 18, 27, and 46, that chronic inflammation of the genito-urinary organs, may, in its turn, give rise to an extraordinary susceptibility of the rectum, that prevents it from retaining as long as usual, the fecal matters, and that cauterisation of the genito-urinary mucous membrane, is sufficient to remove this irritation of the rectum; so, that patients see their diarrhœa checked at the same time with their incontinence of urine and pollutions.

This influence is then, reciprocal, as it is between all the organs that are intimately connected together; it is then of great importance in the study of seminal losses; it plays, for example, a much

more important part than the purely mechanical compression of the vesiculæ seminales.

It is this reciprocal influence that I wished to point out in this chapter, by reporting simple and striking cases, in which each mode of action was isolated, and consequently incontestable; and I have often had occasion to refer to these characteristic facts, in order to give a clear idea of those which are more complicated and more obscure.

DESCRIPTION OF THE PORTE CAUSTIQUE OF SEGALAS.

The instrument is composed of three distinct parts,—1st. A conducting catheter *a*, *Fig. 1*, of gum elastic, graduated into inches, inserted at the lower extremity into a small socket of silver, *b*, and at the upper into a silver tube, *c*. This tube is surrounded, at its upper part, by two discs soldered together, *d*, pierced with a small opening to admit the action of the thumb screw, *e*. The tube *c* has two grooves on the inside, in which slide the winged projections, *ff*, on the upper part of the protecting sheath, *Fig. 2*.

2d. A protecting sheath, *Fig. 2*, the upper portion of which only is visible in *Fig. 1*. This is simply a tube of silver having a longitudinal opening, *gg*, in its upper portion, through which the thumb screw *e*, *Fig. 1*, may act upon the wire or *porte caustique*, *Fig. 3*, and which limits the play of the sheath, *Fig. 2*. To the upper extremity are also soldered two discs perforated in the centre for the passage of the *porte caustique*.

3d. The *porte caustique*, a silver wire, to the lower extremity of which is firmly attached the platina spoon or cistern, *h*, by means of the twisted wires, *l*, thus rendering this portion of the instrument flexible and capable of revolving when curved. The upper extremity, *m*, is square, and to this portion is fitted the nut *n*, *Fig. 1*, and this is secured by the thumb-screw *o*, *Fig. 1*. The platina cistern *h*, *Fig. 3*, has a button or knob on its lower extremity that exactly closes the lower extremity of the tube, *Fig. 2*, and the caustic is thus protected against the fluids in the urethra.

On account of this knob, after the sheath, *Fig. 2*, is inserted into the catheter, *Fig. 1*, the *porte caustique* is introduced from below upwards, that is, its upper extremity, *m*, is inserted into the lower extremity, *b*, of the other tubes, and after traversing their whole length the nut *n* is adjusted and the whole made secure by the screw *o*. Previous to this, however, the caustic is to be fixed in the

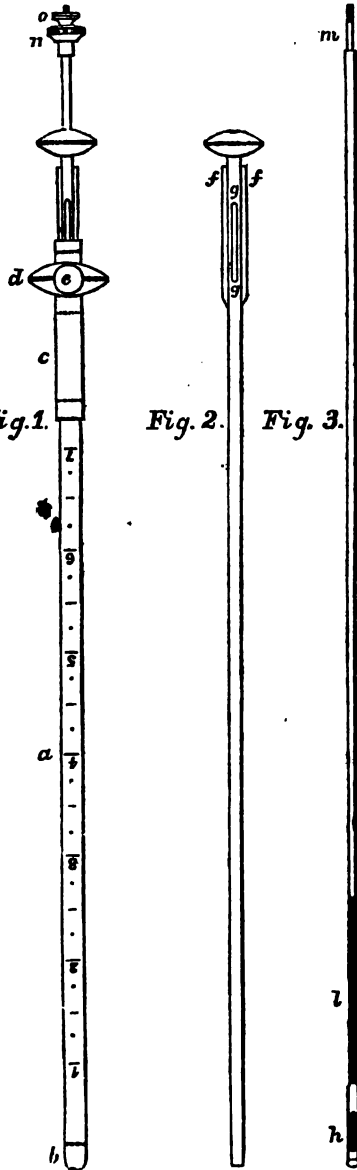


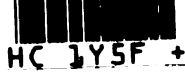
Plate representing Porte Caustique—half size.

platina cistern. A few particles of pure nitrate of silver are placed in it and the cistern is then held over the steady flame of a wax candle or spirit-lamp, to allow the nitrate to melt slowly, so as not to bubble up, as it will when melted too quickly, or when the cistern has not been well cleaned and dried. The asperities must now be rubbed down with a piece of pumice stone, or with any cutting instrument whatever.

Fig. 1 represents the instrument as it appears when adjusted for immediate use. It has been drawn straight merely for the sake of convenience, but, as the graduated portion is flexible, it can be bent to any desirable curve without the action of rotation in the *porte caustique* being thereby prevented. It is of half the size of the instrument of Ségalas.

Manner of using it.—The operator and patient are placed in the usual positions for introducing the catheter. The instrument is introduced curved (though ordinarily it need be but slightly so,) until it arrives at the portion to be cauterised. Then the thumb-screw *e* is loosened, which allows all the parts to move upon each other. The gum-elastic catheter is first drawn off towards the operator, until the screw comes in contact with the upper end of the opening *g g*, in *Fig. 2*; then both together are drawn off the *porte caustique*, *Fig. 3*, and the caustic is then in contact with the surface of the urethra. It may now be made to revolve, by acting upon the nut at its upper extremity, with any degree of celerity required. In drawing it into the sheath again, it is necessary to do so by a rotary motion to prevent the mucous membrane from being caught between the sheath and *porte caustique*.

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